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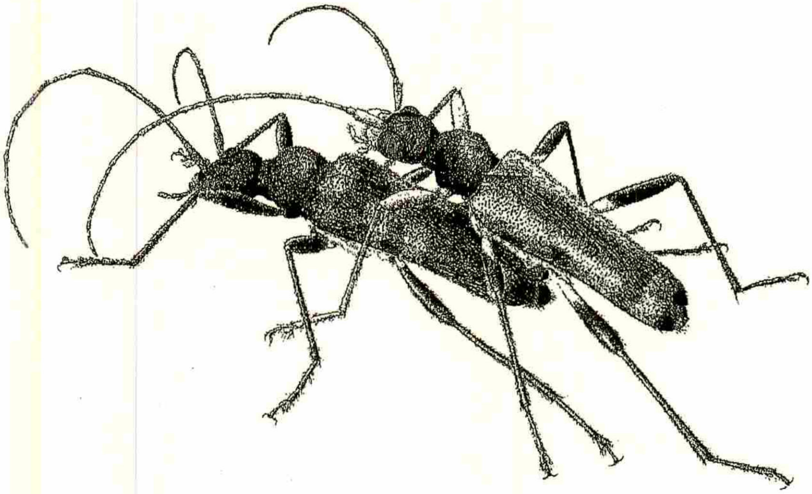

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A New Tenebrionid Genus from Borneo, with Description of a New Species (Coleoptera: Tenebrionidae)

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Abstract A new genus, *Lycidioides* gen. nov., is established and a new species, *Lycidioides kaniei* sp. nov., is described from North Borneo.

Introduction

The beetles having pectinate antennae are well known in some genera of the families Rhipiceridae, Eucnemidae, Elateridae, Anobiidae, Lampyridae, Cerambycidae and so on, but not known in Tenebrionidae, though the male of the alleculid genus *Pseudocistela* has very similar antennal conformation. Recently, two peculiar tenebrionid specimens collected in the natural forest of Sabah, North Borneo were entrusted to me for study. These specimens were provided with the impressive pectinate antennae. Subsequent close examination revealed that this is an undescribed species as expected, and represents a new genus of the tribe Coelometopini. The holotype designated in this paper is deposited in the collection of College of Agriculture, Ehime University. And paratype is preserved in my collection. The abbreviations used herein are the same as those in my previous papers.

Before going into further details, I am very grateful to Mr. Noboru KANIE for his cordial offer of these interesting specimens, and to Assistant Prof. Dr. Masahiro SAKAI, College of Agriculture, Ehime University, Matsuyama, for his kind guidance in many ways.

Lycidioides gen. nov.

Type-species: *Lycidioides kaniei* sp. nov.

Body oblong-oval, strongly convex posteriorly, covered with metallic sheen, similar in shape to the species of the genera *Augolesthus* and *Plamius*.

Head transverse, steeply declined in anterior parts, similar in characters to the species of the genus *Pseudonautes*; clypeus subvertical, distinctly produced; fronto-clypeal suture present; genae transverse, entirely covering orbital portions, abruptly elevated near fronto-clypeal suture; frons narrow, steeply descendant forwards. Eyes extremely large, similar to those in *Pseudonautes*, with inner ocular sulci narrow. Antennae eleven-segmented, distinctly pectinate from fourth to tenth, each of which bears strong ramus. Ultimate segments of labial palpi oblong-oval, those of maxillary palpi short-conical. Mentum obtrapezoidal, strongly produced ventrad. Gula triangular, with a pair of tentorial pits at apical.

Pronotum quadrate, very short and steeply declined laterad, broadly sulcate along lateral margins, similar in appearance to the species of the genus *Pseudonautes*; apical margin emarginate, with border very thick in middle; apical angles obtuse. Scutellum triangular, longer than wide.

Elytra oblong-oval, very similar in appearance to the species of the genera *Augolesthus* and *Plamius*, bi-convex above, depressed between the convexities, with nine striae; ninth striae incurved near apices; humeral calli distinct; elytral epipleura broad basally, distinctly bordered at inner margins. Hind wings normal.

Prosternum very short, steeply declined in front of coxae; prosternal process horizontal. Mesosternum carinate in middle, weakly raised along marginal lines of coxae. Metasternum long, with a pair of strongly engraved transverse sulci along metacoxae. Abdominal sternites moderate in conformation. Male genitalia slender, longer than pronotum, basal piece edged dorso-laterally.

Legs robust; trochanters large, bearing some pubescence; posterior margins of meso- and metafemora pubescent; tibiae short; tarsi long and slender, never bilobate, fifth segment of protarsi longer than the length of four basal segments put together; claws simple.

Diagnosis. The pectinate antennae (probably in male) are the most differentiated feature of the genus. The strongly bi-convexed elytra seem to suggest the relation to the genera *Plamius* and *Augolesthus*, but the overall similarity considering the construction of head, pro- and mesosterna is closely concerning with the genus *Pseudonautes* which has bilobate tarsal segments.

Etymology. The name of genus derives from Greece word "*lykion*" (= *Lyci*- in Latinized word) and also a contraction of Greece word "*-o+eidos*" Latinized into "*-oid*, *-oides*", the former means a kind of thorny Lycian shrub and the latter denote the likeness of form, and totally showing the peculiar antennae of this genus. The gender is masculine.

Lycidioides kaniei sp. nov.

(Figs. 1–9)

Male. Body oblong-oval, strongly convex posteriorly, brilliant. Colour black; head and pronotum metallic dark violet-blue; elytra metallic reddish purple, strongly shiny, somewhat with brassy reflection; venter tinged with purple or brassy in part; antennae mat and infuscate, legs more or less dark reddish brown.

Head transversely oval, adunc downwards in anterior parts; clypeus subvertical in situation, almost flat, distinctly produced, slightly emarginate at apex, coarsely and moderately punctate, the punctures rather large in size; fronto-clypeal suture narrowly and deeply engraved; genae transverse and rather small, weakly rounded at sides, abruptly descendant near fronto-clypeal suture, sparsely punctate; frons narrow and depressed, rather steeply descendant towards clypeus, with punctures sparse, similar in size to those of clypeus; TD/IE = *ca.* 1.93. Eyes extremely large, convex above, roundly expanded laterad and hardly invaded by genae, with

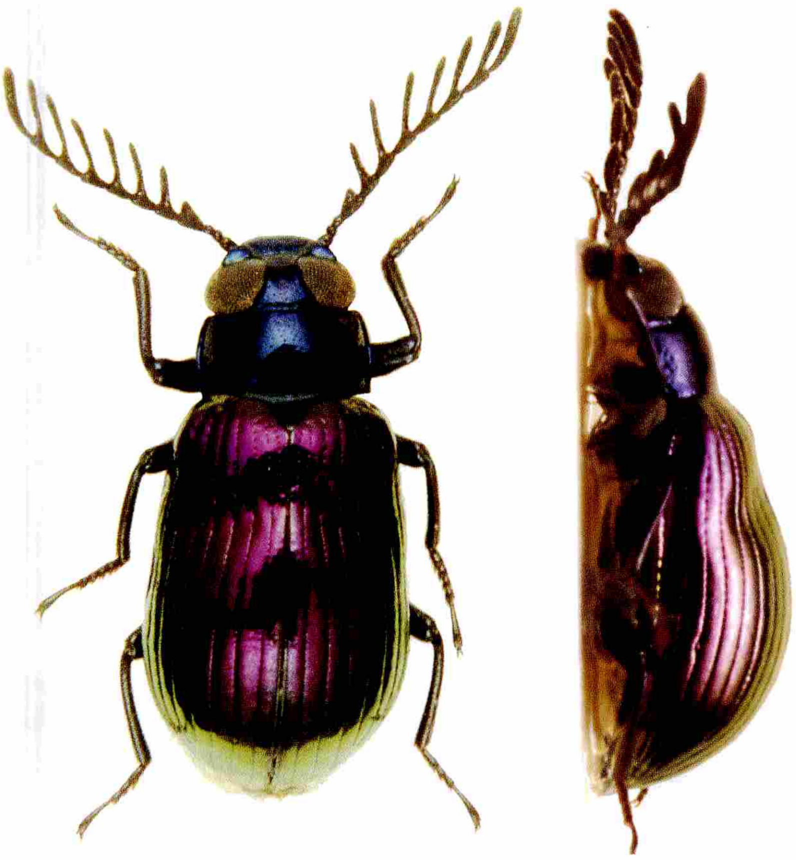

Fig. 1. Habitus of *Lycidioides kaniei* sp. nov.; left in dorsal view; right in lateral view.

inner ocular sulci deeply engraved till the hindmost. Antennae long, reaching close to middle of elytra, strongly pectinate from fourth to tenth; first segment robust; second shortest, short-oval, third a little wider than long; pectinate segments and eleventh densely covered with sensoria and pubescence; fourth large triangular, and produced inwards, 1.25 times as wide as long; fifth with ramus robust and shortest in the pectinate segments; sixth and seventh, eighth to ninth nearly equal in length, respectively, with their rami being the longest in ninth; eleventh longest, 5.6 times as long as wide. Postgenae convex laterad, moderately setaceous. Terminal segments of maxillary palpi shortened, asymmetrically conical. Mentum short-obtrapezoidal, strongly produced downwards, with some coarse punctures. Gula triangular, weakly convex, with a pair of tentorial pits at apical portions.

Pronotum quadrate, moderately convex, steeply declined laterad, widest before middle and PW/PL = *ca*. 1.85; punctures coarse and sparse, smaller than those on frons; apical margin shallowly emarginate, moderately bordered, the border much thickened in median half; apical angles obtusely rounded, a little produced forwards; lateral margins weakly rounded and nar-

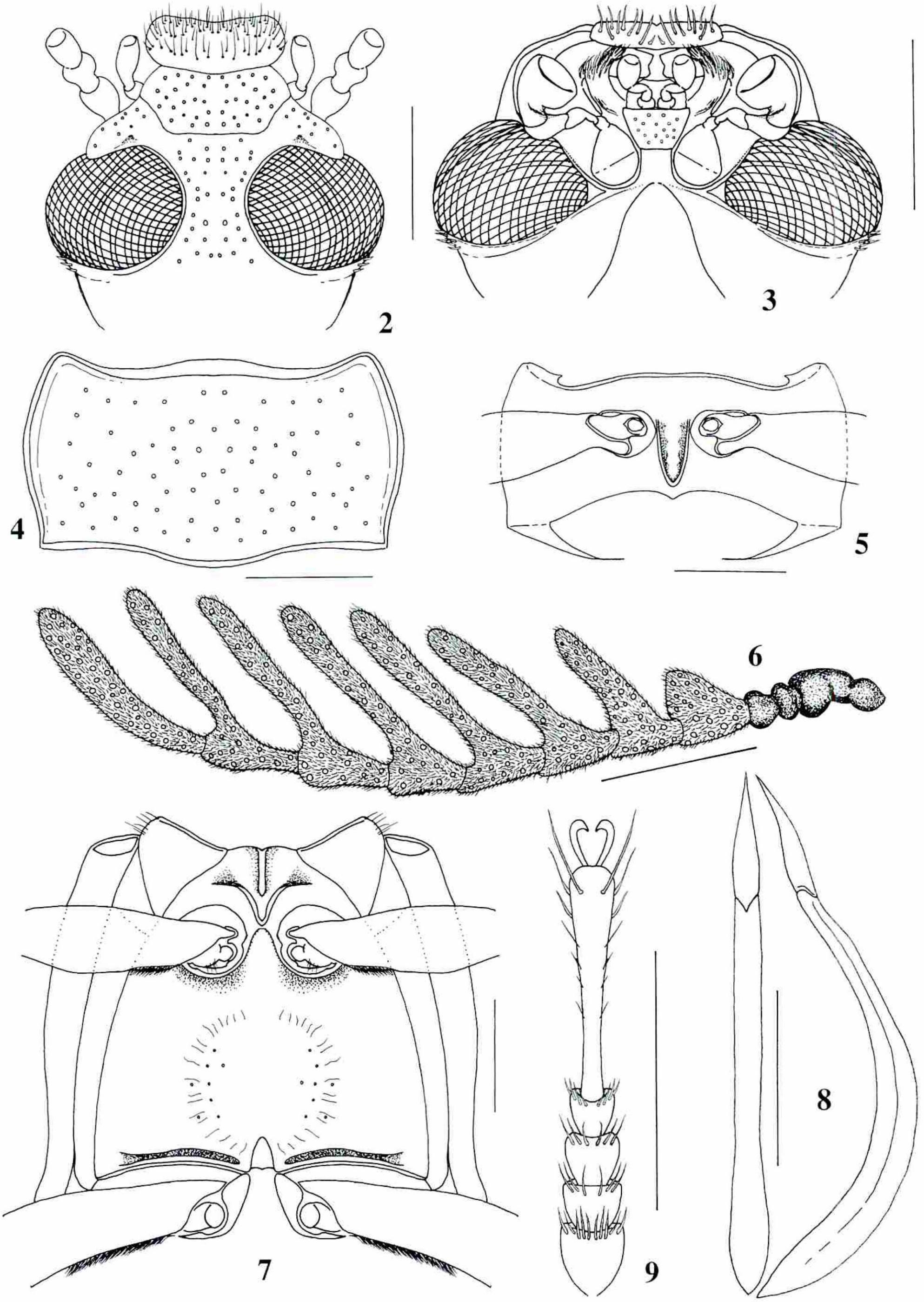

Fig. 2–9. *Lycidioides kaniei* sp. nov. — 2–3, head (2 in dorsal view; 3 in ventral view); 4, pronotum; 5, prosternum; 6, left antenna; 7, meso- and metasterna; 8, male genitalia (left in dorsal view; right in lateral view); 9, protarsus. Scales: 0.5 mm.

rowed to both of apical and basal angles from the widest point, narrowly and distinctly bordered, broadly sulcate along the borders; basal angles obtusely angulate, not produced; basal margin weakly arcuate, narrowly bordered. Scutellum large triangular, longer than wide, almost smooth, with a few minute punctures.

Elytra oblong-oval, widest at apical third, EL/EW = *ca.* 1.57, moderately convex behind base and depressed transversely behind the convexity, and then steeply and strongly convex again like a hump; striae narrow and moderate, ninth striae contiguous with lateral margins, but distinctly curved inwards near apices; strial punctures minute, moderately dense, but distances between them much irregular in length; intervals moderately convex, minutely and much sparsely punctate; humeral calli distinctly swollen; elytral epipleura unevenly flat, reaching middle of fifth abdominal sternite.

Prosternum very short, bordered at apex, steeply declined in front of coxae; prosternal process horizontal, short and cuneate, irregularly depressed along middle. Mesosternum carinate in middle, and weakly raised posteriorly along marginal lines of coxae, but not ridged. Metasternum rather long, strongly convex; transverse sulci along metacoxae strongly engraved. Abdominal sternites finely and sparsely punctate. Male genitalia much slender, longer than pronotum, parameres very short, basal piece edged dorso-laterally.

Legs rather short and robust; trochanters sparsely pubescent; femora robust, dilated from base to middle in mesofemora or to apical third in pro- and metafemora, thence slightly tapered to each apex, posterior margins of mesofemora sparsely pubescent in basal half, those in metafemora densely so in about basal two-thirds; tibiae short and robust, slightly incurved; pubescence on inner margins much denser on protibiae than on the rest; tarsi long and slender, never bilobate, compactly articulate except for each ultimate segment, fifth segment of protarsi distinctly longer than the length of four basal segments put together, LM = *ca.* 11.5, 6.8, 5.9, 25.7; claws simple.

Female. Unknown.

Measurements: Length: 4.7–4.8 mm; width: 2.3–2.4 mm.

Type series. Holotype: ♂, Mt. Trus Madi, alt. 1,200 m, Sabah, Borneo, 11. IV. 1994, N. KANIE leg. (CAEU). Paratype: 1 ♂, same data as the holotype except for alt. 1,000 m, 7–13. IV. 1996 (PCA).

Etymology. This new species is named after Mr. Noboru KANIE, Aichi Pref., who collected all the type series of this species.

要　　約

安藤 清志：北ボルネオ産ゴミムシダマシ科の新属新種の記載．――――北ボルネオ山地帯で採集された櫛状の触角を具えるゴミムシダマシ科の種を新属新種と認め *Lycidioides kaniei* と命名し記載した．クチキムシ科のクロホシクチキムシ属 *Pseudocistela* の雄は本種とよく似た触角の構造を持つが，ゴミムシダマシ科ではこれまで触角が櫛状になった属，種は記録されていなかった．本種はその特徴的な触角と共にヒメキマワリモドキ属 *Plamius* やチビキマワリモドキ属 *Tetragonomenes* に近縁である *Augolesthus* 属に近似した体型で，短い前胸背板や極度に大きな複眼を具える頭部はニシキキマワリモドキ属 *Pseudonautes* の特徴を多く具えるなど Coelometopini 族に所属すると考えられる，極めて特異なゴミムシダマシであると言える．種名は本種の採集者である愛知県在住の蟹江 昇氏に献名した．

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A New Synonym of the Genus *Tetraphyllus* LAP. et BRLL. (Coleoptera: Tenebrionidae)

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Recently I had an opportunity of examining the type specimen of a tenebrionid, *Amarygmus paykullii* DALMAN, 1823 for identify by the request from Naturhistoriska Riksmuseet, Stockholm.

Two kinds of labels are pinned beneath the type, one is a narrow quadrate label, read as "Paykull", and the other is a small one, printed "type". The type locality was not mentioned in the original description leaving a blank as "Hab. —— Mus. Dom. de Paykull", and also not written on the pinned labels of the type specimen. In my careful examination, this species is revealed not belong to the genus *Amarygmus* but to *Tetraphyllus*, and is a rather large female specimen of *Tetraphyllus lunuliger* (MARSEUL, 1876). The latter nane of the species should be a junior synonym of the former owing to the nomenclatural priority. Therefore, the following combination is newly confirmed.

Tetraphyllus paykullii (DALMAN, 1823), **comb. nov.**

Amarygmus? *Paykullii* DALMAN, 1823, Analecta Ent. Extraneae, Stockholm, 1823: 60.
Artactes lunuliger MARSEUL, 1876, Ann. Soc. ent. Fr., 5 (6): 129. **Syn. nov.**
Tetraphyllus lunuliger (MARSEUL, 1876): auct.

Distribution: Japan.

I thank Dr. O. GUSTAFSSON and Dr. J. FERRER, Naturhistoriska Riksmuseet, Stockholm, and Prof. Dr. H. J. BREMER, Melle, Germany, for their kind offer to examine the type specimen of DALMAN.

Ent. Rev. Japan, **58** (2): 113–119, Oct. 30, 2003

Notes on *Peitawopsis* (Coleoptera: Staphylinidae: Tachyporinae), with a Description of a New Species from Japan

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Abstract A new species of *Peitawopsis* is described from Japan under the name *P. takashii.* This is the first record of the tribe Megarthropsini (Tachyporinae) in Japan, and some notes on the genus are given. *Paratachinus punctatissimus* HAYASHI, 1991 is newly transferred to *Peitawopsis.*

The genus *Peitawopsis* SMETANA, 1982 was firstly reported and only known from Taiwan by two species up to the present. The genus is easily recognized from the other tachyporine genera by very coarsely punctured fore body and similar appearance to a *Megarthrus* species. Recently I had an opportunity to examine the third species of this genus collected in the Sakishima Isls. of the Loochoo Archipelago, Japan. Although the known species of the genus are distributed in high mountainous areas of Taiwan, the present species is captured in low altitudinous but deep forest, and it is easily distinguishable from two known species in having very thin and elongate antennae like a *Megarthropsis* species.

On the other hand, I described *Paratachinus punctatissimus* from Taiwan in 1991. It is well similar in general appearance to a *Peitawopsis* species, and I made clear its important structures of the mesosternum and tibiae in the original description of the species. Those characteristics are, however, of the *Peitawopsis*, and I would like to transfer it to *Peitawopsis*. It is closely related to the new species described in the present paper.

The species of *Peitawopsis* are divided into 2 species groups in the difference of structures of antennae, clypeus and some abdominal segments as mentioned in the key.

I am very grateful to Mr. Takashi WATANABE, who is known as an eager lover of Staphylinidae, and to Dr. Katsura MORIMOTO, the Emeritus Professor of Kyûshû Univ., Fukuoka, for his critically reading of the manuscript of this paper.

The Genus ***Peitawopsis*** SMETANA

Type species: *Peitawopsis monticola* SMETANA

SMETANA, A., 1992. Bull. natn. Mus. nat. Sci., 3: 199–201; — 1994. Ibid., 5: 131;— HERMAN, L. 2001., Bull. Amer. Mus. nat. Hist., 265: 679.

SMETANA mentioned in his original description of *Peitawopsis* on an important character that the antennae are moderately thick and long, but in the new species described in this paper the antennae are very thin and long (the scape not swollen) as in *Megarthropsis* CAMERON, 1919 and fully extending beyond anterior third of elytra, the basal 2 segments are polished, and the scape is sparsely pubescent. While in *Megarthropsis* the scape of antenna is rather swollen, not polished, but rather densely pubescent at least on the dorsum.

Protibiae are bicarinate along each outer side like a *Tachinus*-species; meso- and metatibiae are subquadrate in cross section, and each corner of the section becomes a carina in full length of tibia, with sparse spines on the carina.

Peitawopsis punctatissimus (HAYASHI) comb. nov.

Paratachinus punctatissimus HAYASHI, 1991. Ent. Rev. Japan, 46: 48–51.
Tachinus punctatissimus: HERMAN, 2001. Bull. Amer. Mus. nat. Hist., 265: 978.

Distribution: Taiwan (Type locality: Mt. Yangming).

Peitawopsis takashii sp. nov.

(Figs. 1–11)

Body wide, moderately convex, strongly shiny and without microsculpture on dorsum of fore body. Colour dark brown; pronotum a little paler, with margins light brown; mouth organs, basal 2 segments and apical 2 or 3 ones of antennae and 8th and genital segments of abdomen yellowish brown; 3rd to 6th segments of abdomen dark reddish brown; legs light brown. Length: 4.0–4.4 mm (a little shrank). Width: 1.76 mm.

Head about 1.5 times as wide as long, nearly a half as wide as and two-thirds as long as pronotum,weakly depressed insides of eyes, weakly convex, very coarsely, deeply and rather densely punctured except clypeal region, and setae or pubescence indiscernible; clypeal region flat, almost impunctate, bordered at lateral sides by fine ridge, not marginate in the middle of front margin, and fronto-clypeal suture traceable as a fine ridge. Eyes large, strongly prominent, less than a half length of head in the longitudinal diameter. Antennae (Fig. 2) thin, very long,

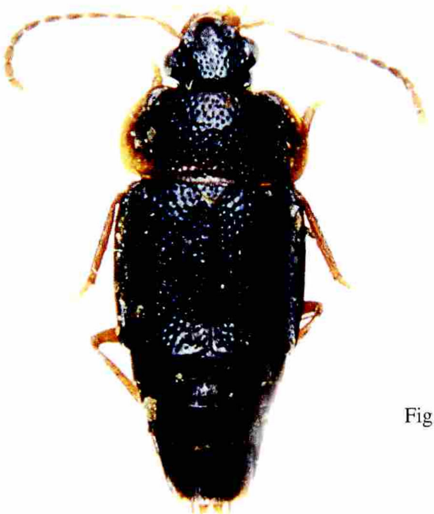
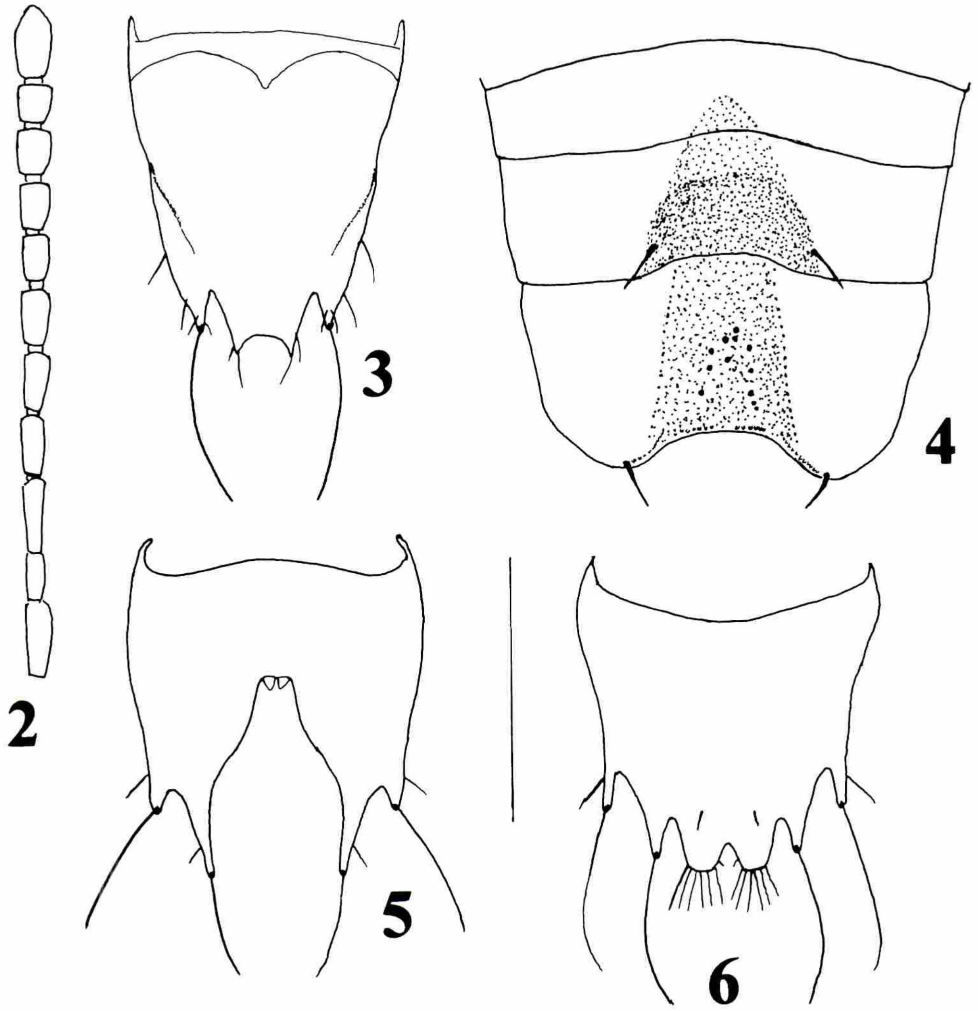


Fig. 1. *Peitawopsis takashii* sp. nov., habitus.



Figs. 2–6. *Peitawopsis takashii* sp. nov. — 2, antenna; 3, male 8th tergite; 4, 5th to 7th abdominal sternites of male; 5, 8th sternite of male; 6, 8th sternite of female. Scale: 0.5 mm.

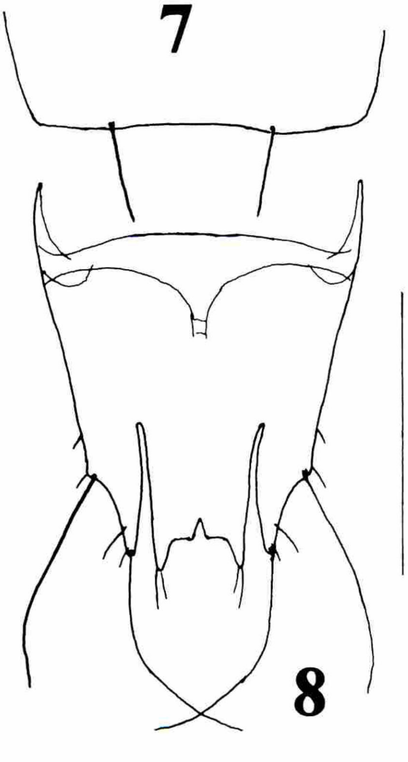
extending a little beyond basal third of elytra; all the segments distinctly longer than wide and somewhat thickened apicad; 1st segment not swollen, about 3 times as wide as 10th; 10th 1.33 times as long as wide, and each segment with the following relative length: 7.5 : 4.0 : 7.0 : 6.0 : 5.5 ; 5.5 : 4.5 : 4.5; 4.5 : 4.0 : 7.0.

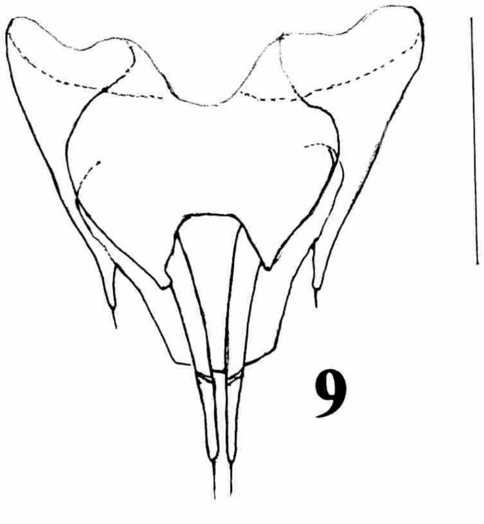
Pronotum strongly transverse, twice as long as wide, nearly as wide as and much shorter than elytra (13 : 23); anterior margin nearly straight, anterior angles produced in front and widely rounded; sides widest a little behind the middle, gently rounded, much more narrowed in front than behind; posterior margin weakly arcuate, and posterior angles widely rounded; disc strongly convex, weakly and narrowly reflexed at sides, with a weak shallow fovea on each side behind the middle, more coarsely, strongly and a little more densely punctured than on head, setae or pubescence indiscernible, and median line indistinct, not indicated.

Elytra subquadrate, a little wider than long (52 : 46), widest at anterior third, gently arcuate at sides, slightly narrowed posteriad and rather strongly convex; lateral margins bearing several short spines; outer apical angles rectangular and inner apical ones obtusely angulate; surface a little more coarsely and densely punctured than on pronotum, and setae or pubescence indiscernible. Hind wings well developed, functional.

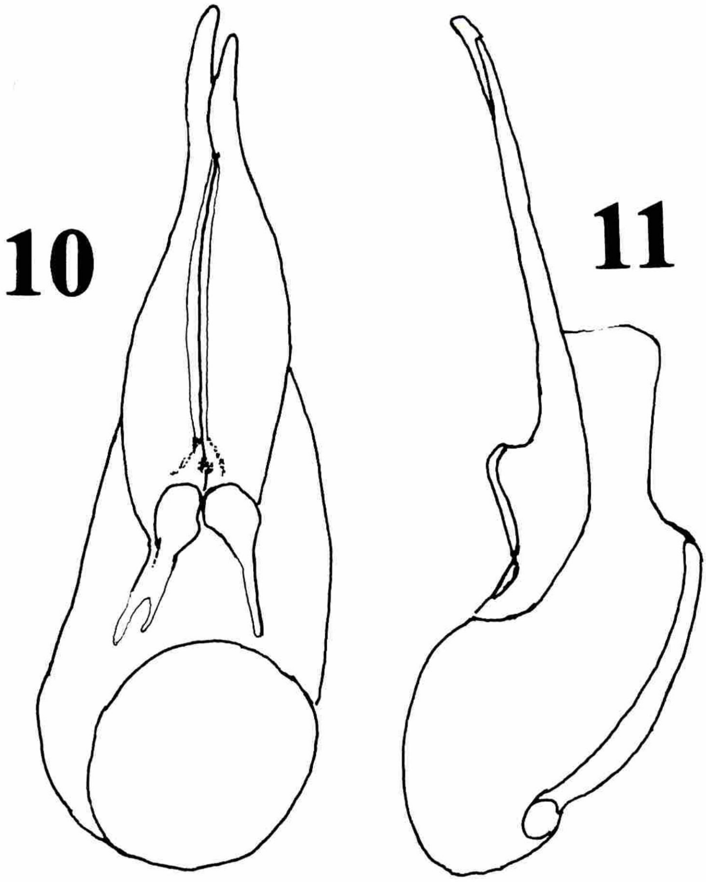
Abdomen rapidly narrowed posteriad; tergites finely and very sparsely punctured, with fine short setae and with obsolete, transversely striate microsculpture, the punctures much finer on posterior tergite; sternites much more coarsely punctured than on opposite tergites, with fine striate microsculpture in each basal area of 3rd to 6th and whole of 7th sternites, the punctures nearly as large as those on head; 3rd tergite with a pair of obscure, small tomentous flecks in middle.

Male: Fifth sternite (Fig. 4) with a small subtriangular depression in middle of hind marginal area. Sixth sternite (Fig. 4) widely, rather deeply and semicircularly depressed medially, the depression almost impunctate, with a fine short seta at each lateral limit of the emarginate posterior margin. Seventh sternite (Fig. 4) subtrapezoidally and shallowly depressed medially, the depression almost impunctate, medially with about twelve tubercles arranged in inverted U-shape, half of the tubercles crowded in the base, and posterior margin with a remarkable long seta at about the middle of each half and shallowly emarginate at posterior margin of the depression. Eighth sternite (Fig. 5) quadrilobed, widely and deeply emarginate medially, shallowly and sharply incised between lateral lobes and inner ones, the median emargination again rather widely and deeply incised, the incision nearly straight at the extreme base, with a small bilobate process there, and each lobe bearing a long bristle at apex, lateral lobe much shorter than inner





Figs. 7–9. *Peitawopsis takashii* sp. nov. — 7, 7th sternite of female; 8, 8th tergite of female; 9, female genital segments. Scales: 0.5 mm.



Figs. 10–11. *Peitawopsis takashii* sp. nov., male genitalia. — 10, ventral view; 11, lateral view.

ones and produced from the middle level of median emargination. Eighth tergite (Fig. 3) trilobate, wide, rather short, only slightly longer than wide (18.0 : 16.5), deeply and triangularly incised between lateral lobes and median one; median lobe much wider than lateral ones, rather deeply emarginate at apex, with a fine short seta at each angle of the emargination; lateral lobes subtriangular, bearing a long bristle at the top and reaching the level of extreme base of the median emargination; genital segment somewhat asymmetrical.

Female: Eighth tergite (Fig. 8) rather short, only slightly longer than wide (18.0 : 17.5), quadrilobed, narrowly and deeply cleft between lateral lobes and inner ones, shallowly and subquadrately emarginate medially, the median emargination again narrowly and shallowly incised medially; inner lobes subacute, with 2 fine short setae at each tip; lateral lobes not extending posteriad beyond inner ones, each with a small protuberance at about the middle of outer margin and bearing a long bristle at each tip of lobes and the protuberances. Seventh sternite (Fig. 7) feebly and widely emarginate at hind margin, with a long bristle at lateral end of the emargination. Eighth sternite (Fig. 6) rather short, slightly shorter than wide, hexalobate, rather widely incised among lobes and narrowly rounded at each apex; inner lobes the widest, each with 6 fine short setae at apex; intermediate ones the longest, not extending posteriad beyond inner ones and bearing a long bristle at each tip; lateral ones the shortest, narrow, with a long bristle at each tip. Genital segment (Fig. 9) rather shorter and wider than that of *P. monticola* SMETANA (the type species of the genus), but basically the same as the type species.

Male genitalia (Figs. 10–11) rather thick and wide in ventral view, a little asymmetrical, slightly curved to the left; penis elongate-suboval in ventral view, rather weakly sclerotized, not membranous but considerably warped in apical portion; parameres subfusiform, wide, rapidly narrowed in apical fourth, bilobate but contiguous except apical portion, nearly flat, with a pair of round protuberances at base; right lobe a little shorter than the left.

Legs short and slender, well similar in the structures to *P. punctatissimus*.

Holotype: ♂, Near Kanbira Falls, Iriomote Is., Okinawa, Japan, 14. IV. 2002, T. WATANABE leg. (in the collection of the Osaka Museum of Natural History). Paratypes: 1♀, same data as the holotype; 1♀, ditto, 25. II. 2001, T. WATANABE leg.; 1♂, Mt. Omoto, Ishigaki Is., Okinawa, Japan, 21. II. 2001, T. WATANABE.

Distribution. Japan (Iriomote Is., Ishigaki Is.)

Notes. The paratypes from Ishigaki Is. are somewhat different from the specimens of Iriomote Is. in the following points: the body colour is a little paler but the 7th abdominal segment is a little darker, apex of the lateral lobe of 8th abdominal tergite is reaching to the level of apex of the median lobe, tubercles on the 7th abdominal sternite are a little less in the number. Those differences are rather slight, therefore I treated the specimens as the same species.

Bionomics. The specimens of the type series were collected in a broad-leaved evergreen forest by shifting very moist leaf litter at side of stream in altitude about 50 m.

Etymology. The specific name is dedicated to Mr. Takashi WATANABE, who collected these interesting materials.

Remarks. The present species is closely related to *P. punctatissimus* (HAYASHI) from Taiwan in having very long and slender antennae, and shorter 8th abdominal segment. The present species is readily distinguishable from the latter in the following points: in *P. punctatissimus* the antennae much longer, extending a little beyond the middle of elytra, the 3rd and 4th abdominal tergites each bearing a pair of tomentous flecks, and apical emargination of median lobe of the female 8th abdominal tergite more deeply emarginate.

Key to the Species Group of *Peitawopsis*

1 Antennae thin and long, at least extending beyond basal third of elytra; abdomen with a pair of tomentous flecks at least on 3rd tergite; 8th abdominal segment rather short and wide, nearly as long as wide or at most only slightly longer than wide; elytra longer, more than 1.5 times as long as pronotum. (*punctatissimus* species group)··· *punctatissimus, takashii* sp. nov.

—Antennae not thin, rather short, barely reaching at elytral humeri; abdomen without tomentous fleck; 8th abdominal segment long and narrow, distinctly longer than wide; elytra shorter, less than 1.3 times as long as pronotum. (*monticola* species group) ··································· ·· *monticola, inexpectata*

要約

林　靖彦：アバタシリホソハネカクシ属 *Peitawopsis* (Smetana, 1992) 属 について．――― アバタシリホソハネカクシ属（新称）はシリホソハネカクシ亜科 Tachyporinae の Megarthropsisni 族に所属する3属数種からなる，小さいが特異な外観を持つグループの一員である．一見ハバビロハネカクシ *Megarthrus* 属の種に似ていて，族名の由来となっている．Megarthropsisni の種は熱帯～亜熱帯アジアから知られており，本属の種はこれまで全て台湾のみから知られていた．筆者は最近，神奈川県の渡辺 崇氏により南西諸島で得られた本属の種を調べることが出来た．この種は，筆者が台湾から記載した *Peitawopsis punctatissimus* (Hayashi, 1991) に非常によく似ているが，触角，雄交尾器などの形態から別種と考えられたので，採集者に因み新種，アバタシリホソハネカクシ *Peitawopsis takashii* として記載した．また，上記2種はタイプ種の *Peitawopsis monticola* Smetana とは第8腹節の構造を異にしており，本属には2種群あると考えられたので，属の特徴について若干の知見を述べ，種群への検索キーを付けた．

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Ent. Rev. Japan, **58** (2): 120, Oct. 30, 2003

New Records of Staphylinidae from Taiwan, 3

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Three staphylinid species are firstly recorded from Taiwan as well as one from Japan. They are widely distributed in Orintal Region.

1. ***Philonthus delicatulus*** BOHEMAN, 1858

1 ex., Kenting Park, Pingtun Hsien, 12. VIII. 1969, T. KOBAYASHI leg.; 1 ex., ditto, 14. VIII. 1969, Y. MAEDA and T. KOBAYASHI leg.; 1 ex., ditto, 9. IV. 1970, T. KOBAYASHI leg.; 1 ex., Neiwan, 24. IV. 1969, Y. MAEDA leg. (New record from Taiwan).

Notes. Specimens from Taiwan are more variable in length, about 6–9 mm than those from the other localities. They agree well with the redescription of CAMERON, 1932 except for the body size.

2. ***Philonthus productus*** KRAATZ, 1859

1 ex., Nanshanchi, 5. III. 1970, T. KOBAYASHI leg. (New record from Taiwan). 1 ex., Sonai, Isl. Yonaguni-jima, Japan, 23. VII. 1964, T. ITO leg.; 1 ex., Nago, Isl. Okinawa, Japan, 15. VII. 1963, M. YASUI leg.; 1 ex., Mt. Omoto, Isl. Ishigaki-jima, Japan, 18. VII. 1964, T. ITO leg. (New records from Japan).

3. ***Gabronthus pygmaeus*** (KRAATZ, 1859)

1 ex., Taimali, 5. V. 1983, N. ITO leg. (New record from Taiwan).

Notes. The specimen examined is rather larger in body length, about 4 mm (2.5–3.5 mm in CAMERON, 1932).

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Ent. Rev. Japan, **58** (2): 121–131, Oct. 30, 2003

A Taxonomic Study of the Genus *Ptomaphaginus* (Coleoptera: Leiodidae: Cholevinae) from the Ryukyu Islands, Japan

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Abstract The genus *Ptomaphaginus* is recorded for the first time from the Yaeyama and Okinawa Groups of the Ryukyu Islands, Japan, with descriptions of two new species, *P. yaeyamaensis* sp. nov. and *P. okinawaensis* sp. nov. Besides, one known species, *P. shibatai* HAYASHI, 1969 is redescribed with some illustrations of important features. A key to the Ryukyuan species of *Ptomaphaginus* is given. A list of all the Japanese species of *Ptomaphaginus* is noted.

Introduction

The genus *Ptomaphaginus*, belonging to the subfamily Cholevinae of the family Leiodidae, was established by PORTEVIN (1914), and is composed of 73 described species in the world (PERKOVSKY, 2001; PERREAU, 2000). Most of them are distributed in the Oriental Region. In Japan, HAYASHI (1969) described *P. shibatai* from Amami-Ôshima Is. of the Ryukyu Isls. as first species of the genus from Japan, NAKANE (1982) discovered a new species, *P. takaosanus* from Honshu, and PERREAU (1996) added two new species from Shikoku. As the result, four species of *Ptomaphaginus* have been known to occur in Japan, and only one of them, *P. shibatai*, is distributed in the Ryukyu Isls.

Recently, we made field surveys in Amami-Ôshima Is. (Amami Group), Okinawa Is. (Okinawa Group), and Ishigaki Is. and Iriomote Is. (Yaeyama Group) of the Ryukyus, and were able to take some specimens of *Ptomaphaginus* by Tullgren apparatus (TA), flight intercept traps (FIT), and so on. Our careful examinations proved that the specimens include two new species inhabiting the Yaeyama and Okinawa Groups, respectively. In this paper, we will revise the Ryukyuan species of *Ptomaphaginus* with descriptions of the new species.

The holotypes designated in this study are deposited in the collections of the Museum of Nature and Human Activities, Hyôgo (MNHA). All the paratypes are preserved in the collection of the first author.

Genus *Ptomaphaginus* PORTEVIN, 1914

[Japanese name: Oninise-chibishidemushi zoku]

Ptomaphaginus yaeyamaensis HOSHINA et SUGAYA, sp. nov.

[Japanese name: Yaeyama-oninise-chibishidemushi]
(Figs. 1, 3, 6, 9–11, 21)

Measurement of holotype: Body 1.8 mm in length; head 0.59 mm in width; pronotum 0.51 mm in length and 0.93 mm in width; elytra 1.2 mm in length and 0.95 mm in width.

Male and female. Coloration. Dorsum almost concolorous, brown to reddish brown; 1st–5th and 11th segments of antennae light brown; other antennal segments dark brown to black; legs reddish brown with brown tarsi; fore tarsi lighter than middle and hind tarsi; mesosternum brown; metasternum reddish brown; venter sometimes a little lighter than metasternum.

Body weakly shining, pubescent on dorsum and about 2.0 times as long as wide (Fig. 1).

Head about 0.66 times as wide as pronotum (Fig. 1), pubescent a little more sparsely and thinly than pronotum and elytra, rarely pubescent very sparsely, and strigose transversely, sometimes much more sparsely strigose than pronotum and elytra; antennae about as long as head width, 1st–4th and 11th segments each longer than wide, 5th segment about as long as wide, other segments wider than long (Fig. 3), relative lengths of 2nd to 11th antennal segments as follows: 3.6: 2.4: 2.0: 1.7: 1.0: 2.7: 1.0: 2.2: 2.4: 4.1, 11th segment oval.

Pronotum about 1.6 times as wide as long (Fig. 1), slightly narrower than and about 0.51 times as long as elytra, widest at base; lateral margins weakly curved and simply narrowed towards apex from base; dorsum transversely strigose and sparsely or densely pubescent (their densities very variable by specimens).

Elytra widest at about basal third of lateral margins, about 1.2 times as long as wide, transversely strigose, and sparsely or densely pubescent (their densities very variable by specimens); sutural stria long and distinct, reaching to side of scutellum.

Legs with typical characteristics of the genus *Ptomaphaginus*; fore tibiae thick; middle and hind tibiae stick-shaped, slightly narrowed towards the bases from the apices; middle and hind tarsi slender.

Male. Fore tarsi dilated in 1st–3rd segments; abdominal segment VI about as long as wide (Fig. 6); aedeagus thick, about 0.28 mm in length and about 0.15 mm in width in ventral view (Figs. 9–11); median lobe subtruncate at apex, C-shaped in lateral view; lateral margins almost straight at about apical two-fifths and curved in an arc at about basal three-fifths in ventral and dorsal views; parameres curved strongly and sinuately in ventral and dorsal views, curved moderately in lateral view.

Female. Fore tarsi simply straight at lateral margins of all segments; spermatheca sharply curved at two points (Fig. 21).

Body length: 1.7–1.8 mm.

Distribution. Ryukyu Islands: Yaeyama Group (Ishigaki Is. and Iriomote Is.).

Type series. Holotype, ♂, Mt. Omotodake, Ishigaki Is., Ryukyus, 30. III. 1995, K. TOYODA leg. (MNHA). Paratypes, 2♀♀, same data as holotype; 1♂, 1♀, Mt. Omotodake,

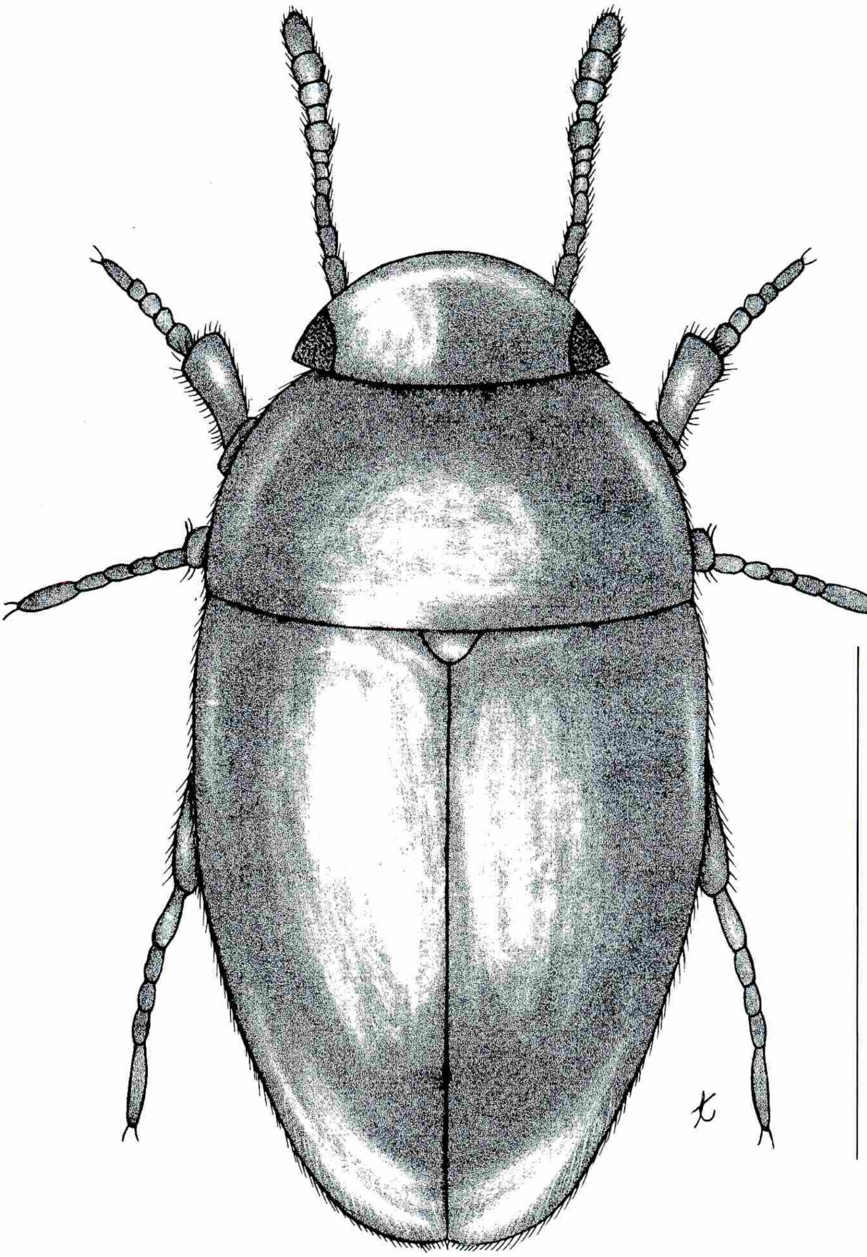


Fig .1. *Ptomaphaginus yaeyamaensis* HOSHINA et SUGAYA, sp. nov. Scale: 1 mm.

Ishigaki Is., Ryukyus, 22. III. 1984, S. NOMURA leg.; 2♂♂, 1♀, Mt. Omotodake, Ishigaki Is., Ryukyus, 3. III. 2003, H. HOSHINA leg. (TA); 1♂, 1♀, Yonehara, Ishigaki Is., Ryukyus, 10. IV. 1986, S. NOMURA leg.; 1♂, 1♀, Mt. Bannadake, Ishigaki Is., Ryukyus, 18–22. VI. 1991, K. MORIMOTO leg.; 1♂, 1♀, Kanpiree, Iriomote Is., Ryukyus, 13. IV. 1986, S. NOMURA leg.; 3♂♂, Komi (alt. 50 m), Iriomote Is., Ryukyus, 13–16. III. 2002, H. SUGAYA leg. (FIT).

Specimens of the related species examined. *Ptomaphaginus franki* PERREAU, 1992; 2♂♂, 1♀, Tengchih (alt. 1400 m), Kaohsiung, Taiwan, 21–23. VII. 2000, H. SUGAYA leg. (TA).

Remarks. This is the first species of the genus *Ptomaphaginus* found in the Yaeyama Group, and is related to the Taiwanese species, *P. franki* described by PERREAU (1992), but the dorsum is reddish, the body length is less than 2 mm, and the aedeagus is relatively robuster (Figs. 9–11), whereas in *P. franki* the dorsum is darker, the body is larger, 2.4 mm in length, and the aedeagus is relatively slenderer (Figs. 12–14).

Etymology. The specific name is derived from the locality of this species, the Yaeyama Group.

Ptomaphaginus shibatai HAYASHI, 1969

[Japanese name: Shibata-oninise-chibishidemushi]

(Figs. 4, 7, 15–17, 22)

Ptomaphaginus shibatai HAYASHI, 1969: 1 (Japan: Amami-Ôshima Is.); PERREAU, 2000: 376.

Male and female. Coloration. Head and pronotum dark brown to black; elytra dark brown; antennae with 1st–5th and 11th segments light brown, 6th–9th segments brown, 10th segment a little lighter than 6th–9th; legs dark brown with light brown fore tarsi and brown or reddish brown middle and hind tarsi.

Body less shining, about 1.9 times as long as wide, and pubescent on dorsum; head transversely strigose, more sparsely and thinly than pronotum and elytra; antennae as shown in fig. 4; pronotum transversely and densely strigose; elytra strigose as on pronotum; sutural stria distinct, reaching basad to side of scutellum; legs typical for a member of the genus *Ptomaphaginus*. Male abdominal segment VI and aedeagus as shown in figs. 7 and 15. Spermatheca as shown in fig. 22.

Body length: 1.9–2.2 mm.

Distribution. Ryukyu Islands: Amami Group (Amami-Ôshima Is. and Tokunoshima Is.).

Specimens examined. 1♂(paratype), Hatsuno, Amami-Ôshima Is., Ryukyus, 3. IV. 1969, H. NOMURA leg. (preserved in the collection of Mr. Y. HAYASHI); 1♀, Tatsugô, Amami-Ôshima Is., Ryukyus, 17. II. 1995, S. ONODA leg. (TA); 1♂, 3♀♀, Mt. Yuidake, Amami-Ôshima Is., Ryukyus, 26–27. III. 2002, H. SUGAYA leg. (FIT); 1♂, 2♀♀, Mt. Yuwandake, Amami-Ôshima Is., Ryukyus, 26–27. III. 2002, H. SUGAYA leg. (FIT); 1♀, Mikyô, Amagi-chô, Tokunoshima Is., 19. II. 1995, S. ONODA leg. (TA).

Remarks. In the original description of *P. shibatai*, HAYASHI (1969) noted that the males have antennae with transverse 4th–5th segments and the females with slender 4th–5th segments. However, all the specimens available for this study have similarly formed antennae with transverse 4th–5th segments in both sexes (Fig. 4), not showing such sexual dimorphism.

Ptomaphaginus okinawaensis HOSHINA et SUGAYA, sp. nov.

[Japanese name: Okinawa-oninise-chibishidemushi]

(Figs. 2, 5, 8, 18–20, 23)

Very similar to *P. shibatai*.

Measurement of holotype: Body 2.1 mm in length; head 0.70 mm in width; pronotum 0.58

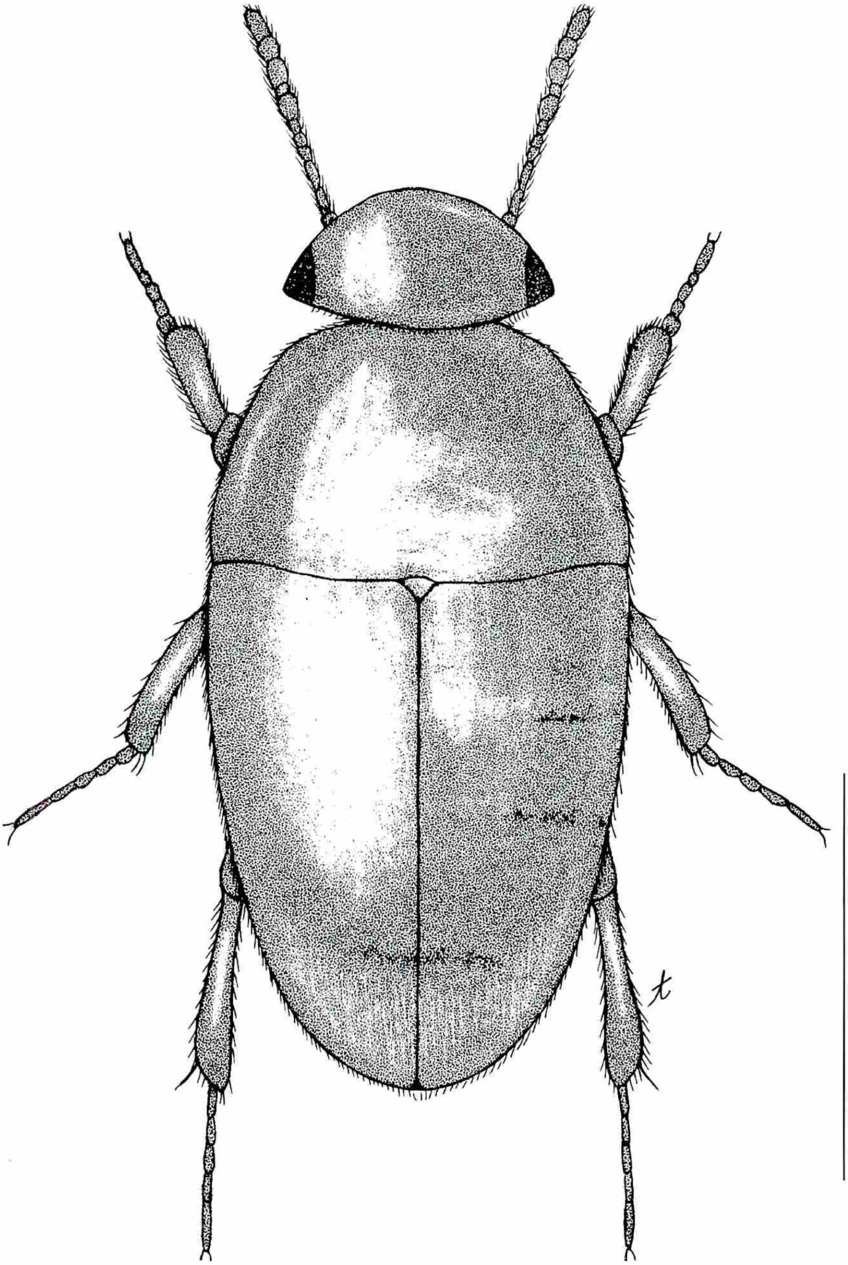
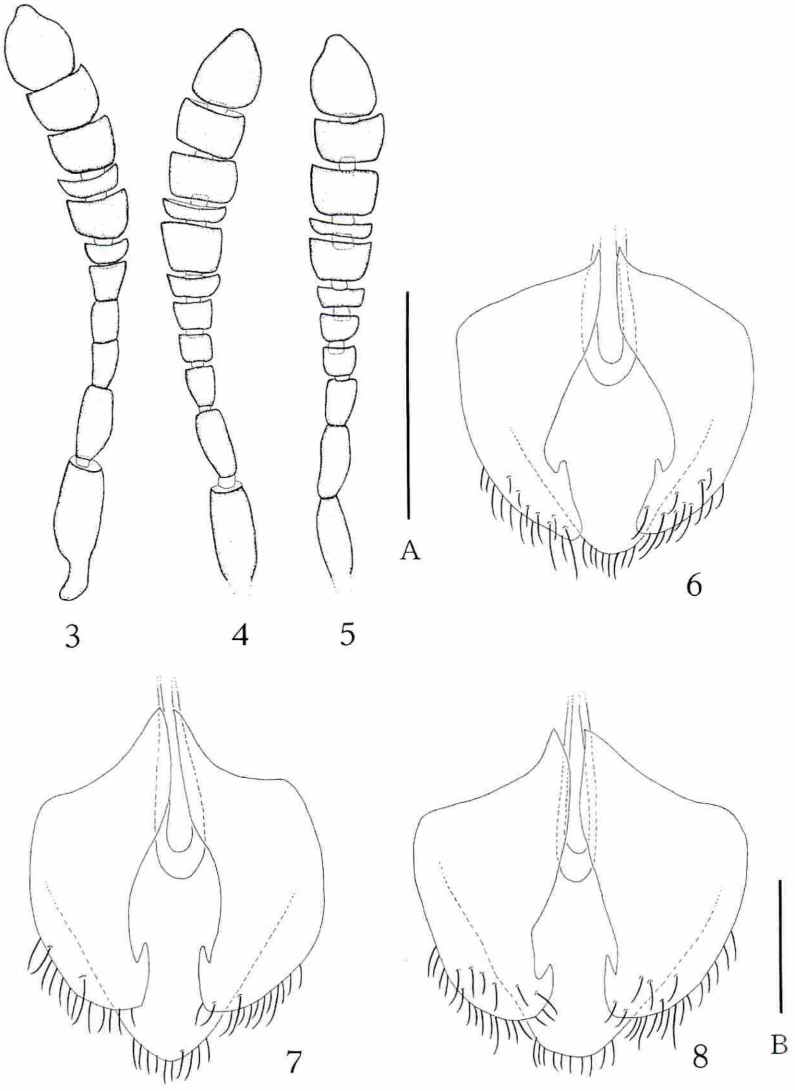


Fig. 2. *Ptomaphaginus okinawaensis* HOSHINA et SUGAYA, sp. nov. Scale 1 mm.

mm in length and 1.0 mm in width; elytra 1.3 mm in length and 1.1 mm in width.

Male and female. Coloration. Head black; pronotum black except for dark brown areas along lateral and basal margins, but concolorously dark brown in rare exceptions; elytra dark brown; antennae almost concolorous, light brown to brown; 1st–3rd and 11th segments sometimes a little lighter than other antennal segments; most parts of legs dark brown; fore tarsi light brown; middle and hind tarsi brown or reddish brown; meso- and metasterna reddish brown; venter a little lighter than metasternum.

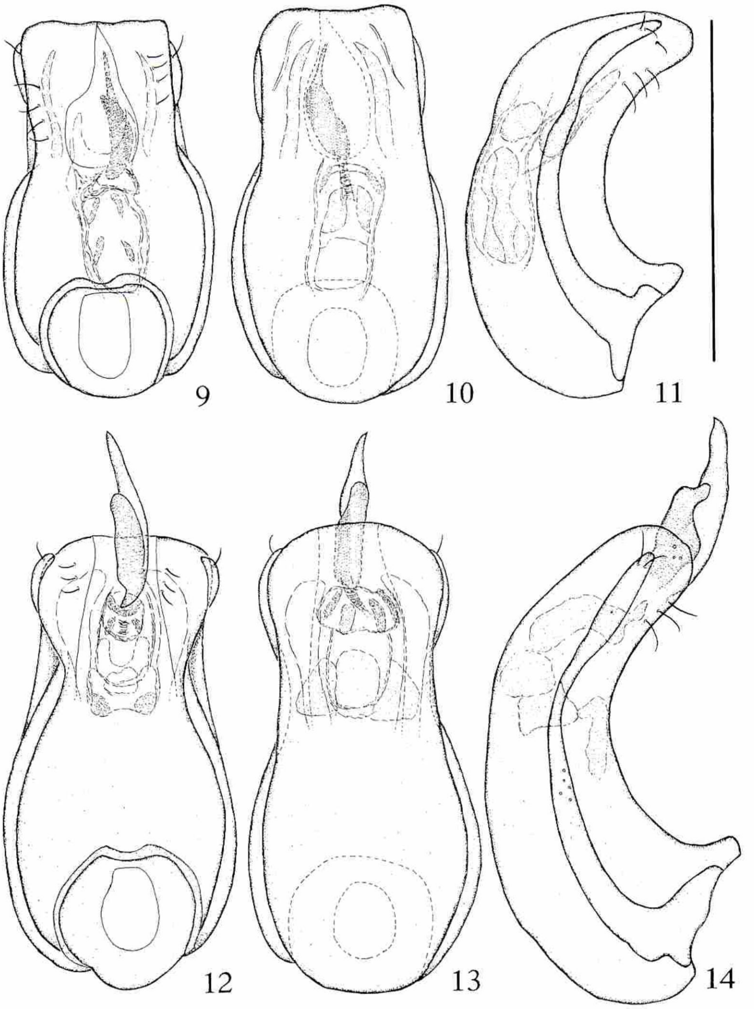


Figs. 3–8. Antennae (3–5) and male abdominal segment VI (6–8). — 3 and 6, *Ptomaphaginus yaeyamaensis* HOSHINA et SUGAYA, sp. nov.; 4 and 7, *P. shibatai* HAYASHI; 5 and 8, *P. okinawaensis* HOSHINA et SUGAYA, sp. nov. Scale A: 0.25 mm for Figs. 3–5. Scale B: 0.1 mm for Figs. 6–8.

Body weakly shining, pubescent on dorsum and about 1.9 times as long as wide (Fig. 2).

Head about 0.67 times as wide as pronotum (Fig. 2), pubescent a little more sparsely and thinly than on pronotum and elytra, strigose transversely and more sparsely than on pronotum and elytra; antennae about as long as head width, 1st–4th and 11th segments longer than wide, other segments wider than long (Fig. 5), relative lengths of 2nd to 11th antennal segments as follows: 3.6: 2.3: 2.0: 1.4: 1.0: 2.0: 0.70: 2.1: 2.3: 4.0, 11th segment oval.

Pronotum about 1.7 times as wide as long (Fig. 2), slightly narrower than and about 0.45 times as long as elytra, widest between base and basal tenth of lateral margins, and simply narrowed thence towards apex in a weak curve: dorsum transversely strigose and pubescent moder-



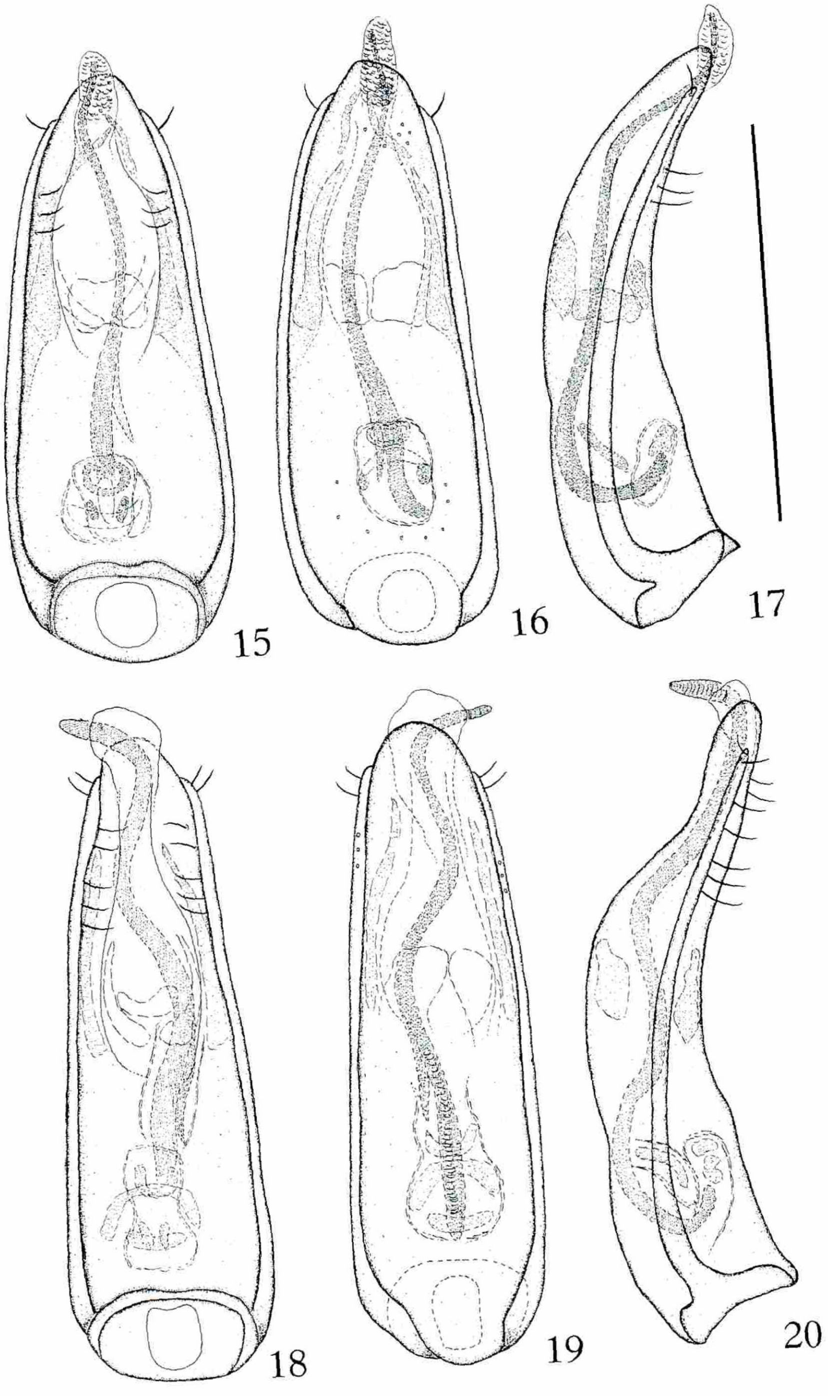
Figs. 9–14. Aedeagi. — 9–11, *Ptomaphaginus yaeyamaensis* HOSHINA et SUGAYA, sp. nov.; 12–14, *P. franki* PERREAU; 9 and 12, ventral views; 10 and 13, dorsal views; 11 and 14, lateral views. Scale : 0.25 mm.

ately or densely (their densities variable by specimens).

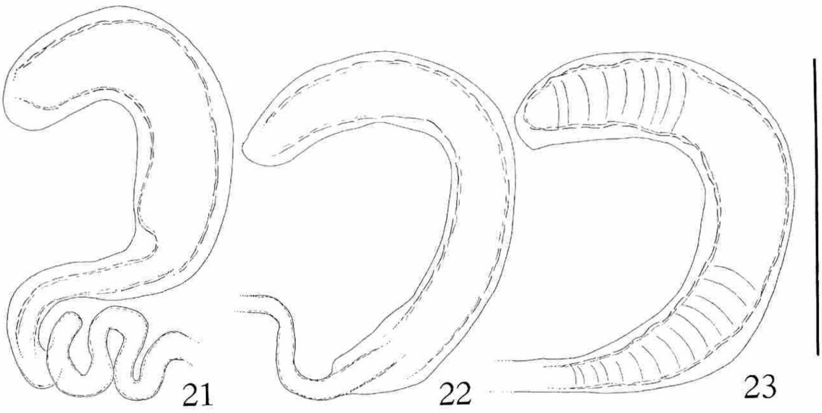
Elytra widest at about basal third of lateral margins, about 1.3 times as long as wide, transversely strigose, and moderately or densely pubescent as on pronotum (their densities variable by specimens); sutural stria long and distinct, reaching basad to side of scutellum.

Legs typical for a member of the genus *Ptomaphaginus*; fore tibiae thick; middle and hind tibiae stick-shaped, slightly narrowed towards the base from the apex; middle and hind tarsi slender.

Male. Fore tarsi dilated in 1st–3rd segments; abdominal segment VI wider than long (Fig. 8); aedeagus slender, about 0.40 mm in length (excluding the length of sclerites of the inner sac) and about 0.13 mm in width in ventral view (Figs. 18–20); median lobe simply straight at lateral margins and rounded at apical margins in ventral and dorsal views; dorsal margins strongly and



Figs. 15–20. Aedeagi. — 15–17, *Ptomaphaginus shibatai* HAYASHI; 18–20, *P. okinawaensis* HOSHINA et SUGAYA, sp. nov.; 15 and 18, ventral views; 16 and 19, dorsal views; 17 and 20, lateral views. Scale : 0.25 mm for Figs. 15–20.



Figs. 21–23. Spermatheca. — 21, *Ptomaphaginus yaeyamaensis* HOSHINA et SUGAYA, sp. nov.; 22, *P. shibatai* HAYASHI; 23, *P. okinawaensis* HOSHINA et SUGAYA, sp. nov. Scale: 0.1 mm for Figs. 21–23.

warpedly curved near apex in lateral view; parameres slender, almost straight in ventral and dorsal views, weakly curved in lateral view; the largest sclerite of the inner sac twisted.

Female. Protarsi simply straight at lateral margins of all segments; spermatheca bent at one point (Fig. 23).

Body length: 1.9–2.1 mm.

Distribution. Ryukyu Islands: Okinawa Group (Okinawa Is.).

Type series. Holotype, ♂, Ie-Rindô (alt. 300 m), Okinawa Is., Ryukyus, 11–15. IV. 2001, H. SUGAYA leg. (TA and MNHA); 4♂♂, 6♀♀, same data as holotype; 1♀, Hichi-Ôtaki, Okinawa Is., Ryukyus, 13. IV. 1996, H. HOSHINA leg. (TA); 1♀, Yona, Okinawa Is., Ryukyus, 12. IV. 2001, H. SUGAYA leg. (TA); 3♀♀, Mt. Yonahadake, Okinawa Is., Ryukyus, 20–22. IV. 2002, H. SUGAYA leg. (TA).

Remarks. The present new species is the first representative of the genus *Ptomaphaginus* in the Okinawa Group, and can be easily distinguished from *P. yaeyamaensis* sp. nov. by having black head and pronotum, dark brown elytra, and the body 1.9–2.1 mm in length. It is similar to *P. shibatai*, but the antennae are almost concolorous, light brown to brown, and the aedeagus is relatively slenderer in ventral and dorsal views (Figs. 18–19), whereas in *P. shibatai*, the antennae have the 6th–10th segments darker than other segments and the aedeagus is slightly thicker in ventral and dorsal views (Figs. 15–16).

Etymology. The specific name is derived from the name of the type locality, Okinawa Is.

A Key to Species of the Genus *Ptomaphaginus* in the Ryukyus

1. Body brown to reddish brown on dorsum; body length 1.7–1.8 mm; male genitalia robust in general (Figs. 9–11); median lobe almost truncate at apical margin in ventral and dorsal views (Figs. 9–10); distribution: Yaeyama Group. .... *P. yaeyamaensis* sp. nov.

—Head and pronotum dark brown to black, elytra dark brown; body length usually more than 2 mm; male genitalia about 2.5–3 times as long as wide (Figs. 15–20); median lobe arcuate apically in ventral and dorsal views (Figs. 15–16 and 18–19).. 2

2. Antennae with 6th–10th segments brown and darker than other segments; male genitalia a little thicker in ventral and dorsal views (Figs. 15–16); median lobe simply and weakly curved in lateral view (Fig. 17); distribution: Amami Group. .... *P. shibatai* HAYASHI

—Antennae almost concolorous, light brown to brown; male genitalia relatively slender in ventral and dorsal views (Figs. 18–19); median lobe warpedly curved near apex in lateral view (Fig. 20); distribution: Okinawa Group. .... *P. okinawaensis* sp. nov.

A List of Japanese Species of the Genus *Ptomaphaginus*

(The words written in brackets are Japanese names)

Ptomaphaginus ishizuchiensis PERREAU [Ishizuchi-oninise-chibishidemushi]

Ptomaphaginus ishizuchiensis PERREAU, 1996: 286; PERREAU, 2000: 372.

Distributuion. Shikoku.

Ptomaphaginus nipponensis PERREAU [Yamato-oninise-chibishidemushi]

Ptomaphaginus nipponensis PERREAU, 1996: 287; PERREAU, 2000: 373.

Distribution. Shikoku.

Ptomaphaginus okinawaensis sp. nov. [Okinawa-oninise-chibishidemushi]

Distribution. Ryukyus: Okinawa Group (Okinawa Is.).

Ptomaphaginus shibatai HAYASHI [Shibata-oninise-chibishidemushi]

Ptomaphaginus shibatai HAYASHI, 1969: 1; PERREAU, 2000: 376.

Distibution. Ryukyus: Amami Group (Amami-Ôshima Is. and Tokunoshima Is.).

Ptomaphaginus takaosanus NAKANE [Takao-oninise-chibishidemushi]

Ptomaphaginus takaosanus NAKANE, 1982: 103; PERREAU, 1996: 285; PERREAU, 2000: 376.

Distribution. Honshu.

Ptomaphaginus yaeyamaensis sp. nov. [Yaeyama-oninise-chibishidemushi]

Distibution. Ryukyus: Yaeyama Group (Ishigaki Is. and Iriomote Is.).

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We wish to express our hearty thanks to Dr. Hiroyuki SASAJI (Fukui Pref.) who checked kindly our manuscript of this paper. We also owe our thanks to Mr. Yasuhiko HAYASHI (Hyôgo

Pref.), Dr. Katsura MORIMOTO (Fukuoka Pref.), Dr. Shûhei NOMURA (National Science Museum, Tokyo), Mr. Shigeru ONODA (Kagoshima Pref.), and Mr. Koji ARAI (Saitama Pref.) for their offering us the valuable specimens.

要約

保科 英人・菅谷 洋：琉球産鞘翅目タマキノコムシ科チビシデムシ亜科オニニセチビシデムシ属（*Ptomaphaginus*）の分類学的研究.——— 琉球産 *Ptomaphaginus* 属は，今まで奄美大島から *P. shibatai* HAYASHI, 1969 シバタオニニセチビシデムシただ1種が知られていた．著者らは，今まで *Ptomaphaginus* 属の記録がなかった八重山諸島の石垣島と西表島，沖縄諸島の沖縄本島において，本属に含まれる2種の新種の標本を得た．本論文ではこの2新種を記載するとともに，琉球産 *Ptomaphaginus* 属の再検討をおこなった．八重山産 *P. yaeyamaensis* sp. nov. ヤエヤマオニニセチビシデムシは，台湾産の近縁種である *P. franki* PERREAU, 1992 と体サイズや背面の色によって区別できる．沖縄本島産 *P. okinawaensis* sp. nov. オキナワオニニセチビシデムシは，触角の色やオス交尾器によって，シバタオニニセチビシデムシと区別できる．また，シバタオニニセチビシデムシは，HAYASHI (1969) の原記載では，触角の性的二型が報告されていたが，著者らの形態観察では，性的二型は認められなかった．さらに，琉球産3種の検索表と，今回記載された2新種を含む日本産 *Ptomaphaginus* 属全6種のリストを付記した．

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Ent. Rev. Japan, **58** (2): 133–141, Oct. 30, 2003

Notes on *Paratachinus* (Coleoptera: Staphylinidae) with a Description of a New Species

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Abstract The genus *Paratachinus* CAMERON is re-examined and treated as a valid genus, with a description of a new species of *Paratachinus yamato* from Japan, and synonymizations are given for *P. laticollis* CAMERON, *P. monticola* CAMERON and *P. latus* COIFFAIT.

Since CAMERON, 1932 established the genus *Paratachinus* for two species, *P. laticollis* CAMERON and *P. monticola* CAMERON without designation of the genotype, the validity of the genus and its author's name had been argued by the many scholar (SCHEERPELTZ, 1934, BLACKWELDER, 1952, ULLRICH, 1975, COIFFAIT, 1982, 1984, CAMPBELL, 1988, LI, 1995 and HERMAN, 2001). Although the recent study by HERMAN, 2001, who accepted not CAMERON (article 13.3 and 50.1) but BLACKWELDER as the author of the generic name because of his designation of the type species for the genus, I will treat the author of this genus under the opinion of BLACKWELDER, 1952 by the reason such as "It is not reasonable to reject such names on this account* (*the strict interpretation of Article 25 amended), in the view of the present writer" mentioned by him.

Regarding with the validity of the genus, I had an opportunity to examine the type series of *Paratachinus laticollis* CAMERON and *P. monticola* CAMERON, designate by BLACKWELDER. After close examination of the types, it is concluded that the genus *Paratachinus* should be treated as a valid genus because of unique structures of meso- and metasterna.

The determination of the genus of *Paratachinus punctatissimus*** described from Taiwan was based on the very similar structure of the mesosternum, but the general appearance is well similar to a *Megarthrus*-species, with the middle and hind tibiae distinctly quadricarinate. Those characteristics share with other genera of Megarthropsini (Tachyporinae), and it became clear that this species belongs to the genus *Peitawopsis* SMETANA.

Up to the present the genus *Paratachinus* has been known from North India and Nepal. In this paper I will describe an additional new species from Japan under the name *Paratachinus yamato*, compare the genera *Paratachinus* and *Tachinus*, and give a synonymic list for *P. laticollis*, *P. monticola* and *P. latus*.

The holo- and allotype and a part of the paratypes are preserved in the collection of the Osaka Museum of Natural History.

I wish to express my sincere gratitude to Mr. M. J. D. BRENDEL for his kind loan of the type series of *Paratachinus*. I am very grateful to Dr. Shun-Ichi UÉNO, Emeritus Curator of the National Science Museum (Nat. Hist.), Tokyo, for his invaluable advice on nomenclatural problems, to Mr. Tateo ITO, my close research fellow, for his kind offer of this interesting species, and also thank to Dr. Kiyoshi ANDO for his critically reading the manuscript of this paper.

**Recently Dr. HERMAN suggested me in personal communication that *Paratachinus punctatissimus* HAYASHI belongs to a genus of Megarthropsini, and it is probably a new genus.

The genus ***Paratachinus*** CAMERON

Type species: *Paratachinus laticollis* CAMERON (subsequently designated by BLACKWELDER, 1952)
Paratachinus CAMERON, 1932. Fn. Brit. India, III: 396 (species included: *laticollis* and *monticola*); — SCHEERPELTZ, 1934. Col. Cat., 139: 1508.
Paratachinus BLACKWELDER, 1952: HERMAN, 2001a: 11.
Tachinoderus: sensu ULLRICH, 1975: 291; — CAMPBELL, 1988 : 276; — LI, 1995 :207 — HERMAN, 2001b: 922.

Species of the present genus are well similar in general appearance and mouth organs to *Tachinus* species, especially to its subgenus *Tachinoderus*, but it is easily distinguishable from the latter genus by the following key:—

1. Mesosternum (Figs. 6, 8) with a laterally compressed remarkable tubercle in the middle, with anterior carina or carinae and posterior carina, and the posterior carina semicircular, reaching to a raised margin of mesosternal process at the base; antennae with basal 2 segments polished, 3rd weakly so; metasternum (Figs. 7, 9) rather deeply emarginate posteriorly, without median impressed line between metacoxae, the emargination not divergent posteriad, rather parallel-sided, therefore coxae are seemingly enclosed with the emargination .... *Paratachinus* CAMERON

—Mesosternum at most weakly and simply convex in the middle, without tubercle and carinae; antennae with basal 4 segments polished (in *Tachinoderus* basal 3 polished and 4th weakly so); metasternum rather shallowly emarginate posteriorly, with a median impressed line between metacoxae, the emargination widely divergent posteriad, therefore hind coxae not enclosed with them .... *Tachinus* MOTSCHULSKY

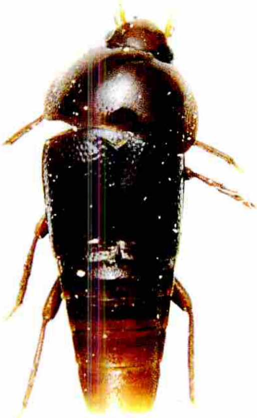
Notes: Although species of *Paratachinus* are, indeed, very similar in general appearance to those of *Tachinoderus* (subgenus of the genus *Tachinus*), but the former genus is different from the latter in the structures of the meso- and metasterna. In *Paratachinus laticollis* the anterior carina of the mesosternum is single, strong, extending in front and reaching to basal margin of the mesosternum, while in *Paratachinus yamato* sp. nov., the mesosternum has rather short three anterior carinae, lateral carinae of the three starting from basal margin, not reaching the tubercle, and median one of them duplicate, extending anteriad from the tubercle and not reaching to basal margin.

Paratachinus yamato sp. nov.

(Figs. 3, 8–18)

Body subfusiform, strongly convex above and well shiny, without microsculpture in dorsum of fore body. Colour dark brown, head nearly black, elytra sometimes a little paler, obscurely paler along suture and at apical margins, with shoulders yellowish; abdomen a little darker, obscurely and widely reddish brown at hind margin of each segment; mouth organs reddish brown; antennae pale yellowish brown, with basal 3 and ultimate segments yellowish; pronotum semitransparently brown at margins; legs brown.

Length (Width): 3.5–3.7 (1.2) mm.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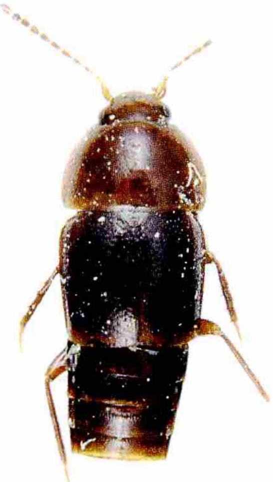
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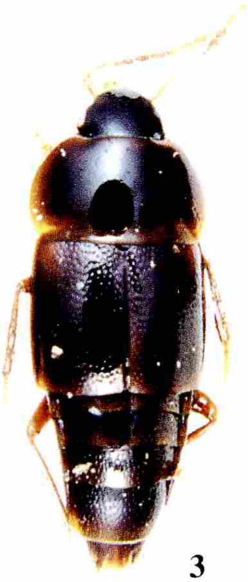
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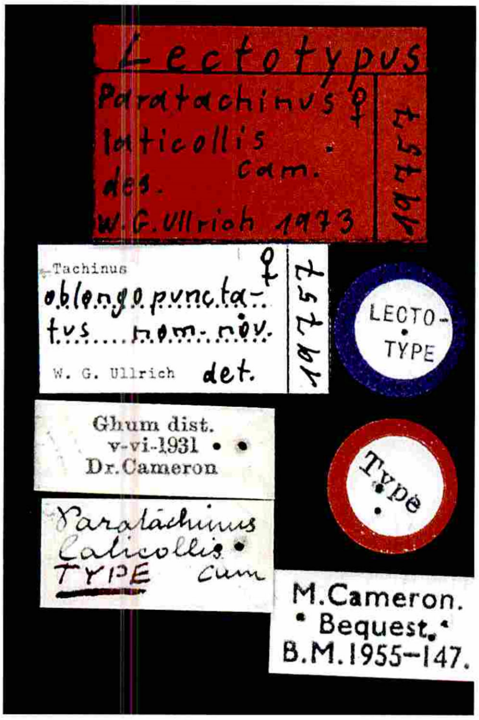

Lectotypus
Paratachinus ♀
laticollis
des. cam.
W. G. Ullrich 1973
19757

Tachinus ♀
oblongopunctatus nom. nov.
W. G. Ullrich det.
19757

LECTO-
TYPE

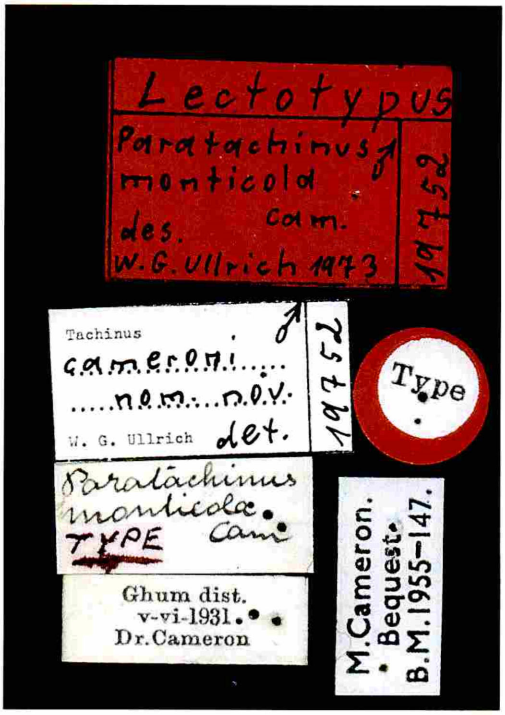
Ghum dist.
v-vi-1931
Dr. Cameron

Type

Paratachinus
laticollis
TYPE Cam

M.Cameron.
Bequest.
B.M.1955-147.

4


Lectotypus
Paratachinus ♂
monticola
des. cam.
W. G. Ullrich 1973
19752

Tachinus ♂
cameroni
nom. nov.
W. G. Ullrich det.
19752

Type

Paratachinus
monticola
TYPE Cam

Ghum dist.
v-vi-1931
Dr. Cameron

M.Cameron.
Bequest.
B.M.1955-147.

5

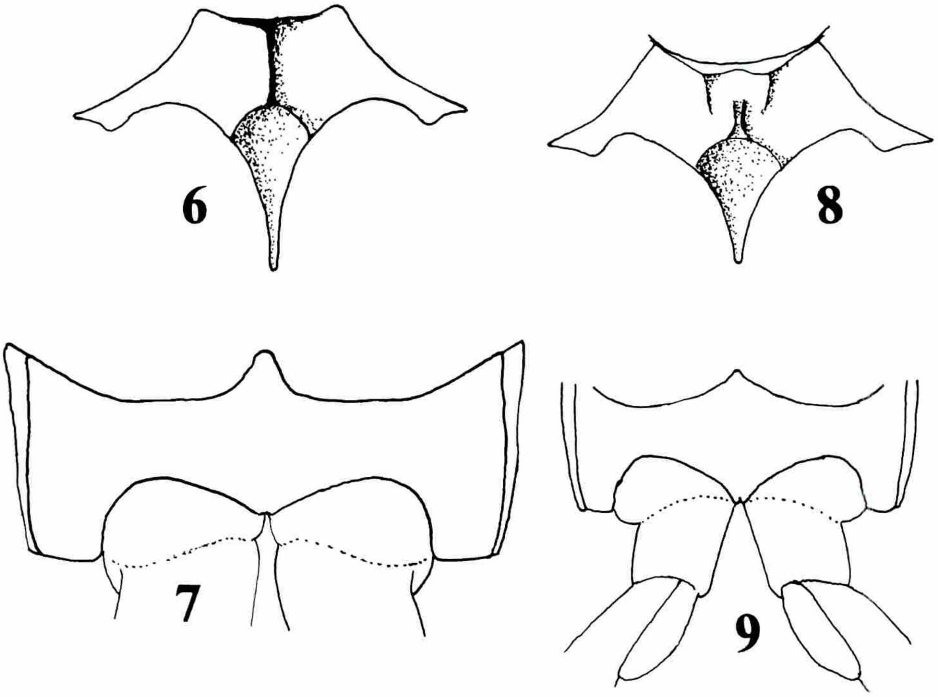
Figs. 1–5. *Paratachinus* spp. — 1, *Paratachinus laticollis* CAMERON, habitus; 2, *P. monticola* CAMERON, habitus; 3, *P. yamato* sp. nov., habitus; 4, *P. laticollis* CAMERON, the labels attatched to the holotype; 5, *P. monticola* CAMERON, labels attatched to the holotype.

Head wider than long (16 :13), half as wide as and a little shorter (13 : 19) than pronotum, weakly convex above, finely and sparsely punctured, setae indiscernible; fronto-clypeal region not limited. Eyes moderate in size, well prominent laterad. Antennae rather long and pubescent, clearly extending beyond elytral humeri; basal 2 segments distinctly polished, and 3rd segment weakly so; basal 6 and 11th segments distinctly longer than wide, 7th to 9th slightly so, 10th nearly as long as wide, and each segment with the following relative length: 7.0 : 4.5 : 6.0 : 4.0 : 4.0 : 3.5 : 3.5 : 3.5 : 3.5 : 3.5 : 5.5.

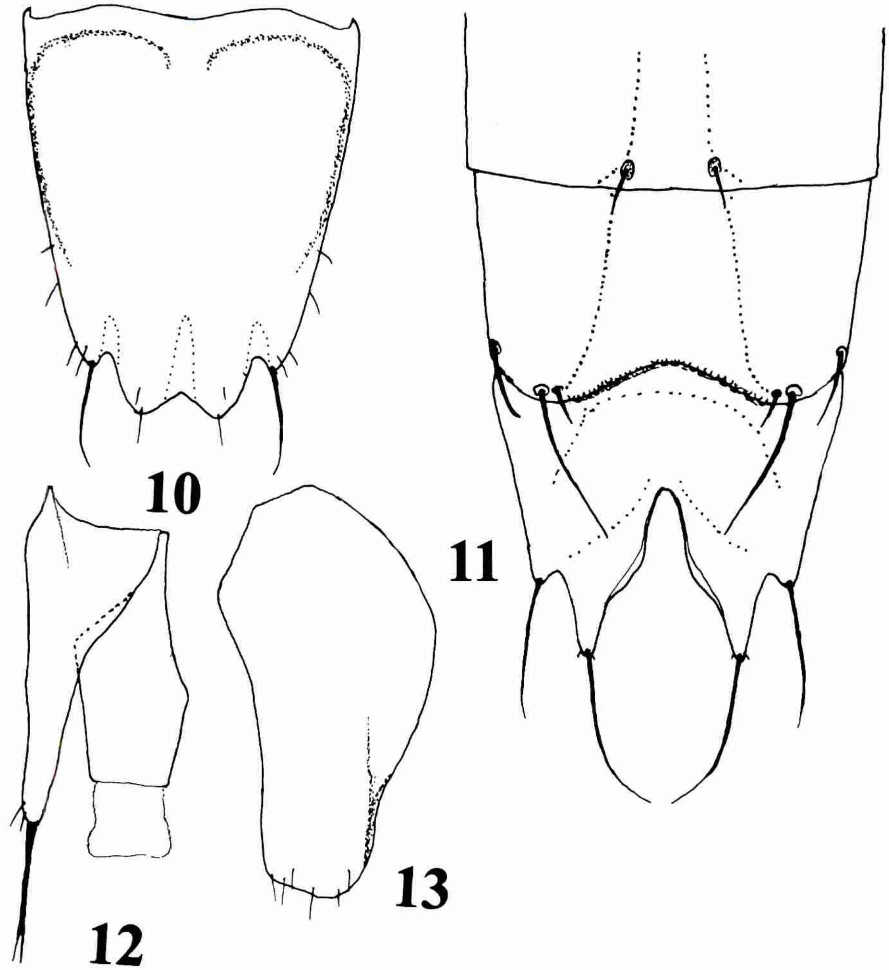
Pronotum strongly narrowed anteriad, about 1.7 times as wide as long, slightly wider than and about two-thirds as long as elytra, extensively rounded at sides and widest at basal third; front margin narrowly emarginate behind eyes and basal margin nearly straight; front angles much more widely rounded than basal ones; punctures minute and very sparse, a little smaller and sparser than those on head, and setae indiscernible.

Elytra subquadrate, a little wider than long (30 : 27), feebly arcuate at sides and apical margins, with fine small spines at shoulders; punctures coarse and sparse, much larger than those on head, each with a very minute and barely discernible hair.

Mesosternum (Fig. 8) bearing a median tubercle as in *P. laticollis*, with three anterior carinae, the median carina of them short, running anteriad from the median tubercle, finely and shallowly sulcate medially and not reaching basal margin, while the lateral carinae of them also short, running posteriad from basal margin and not reaching to the tubercles. Metasternum (Fig.



Figs. 6–9. *Paratachinus* spp. — 6, *P. laticollis* CAMERON, mesosternum; 7, ditto, metasternum; 8, *P. yamato* sp. nov., mesosternum; 9, ditto, metasternum.

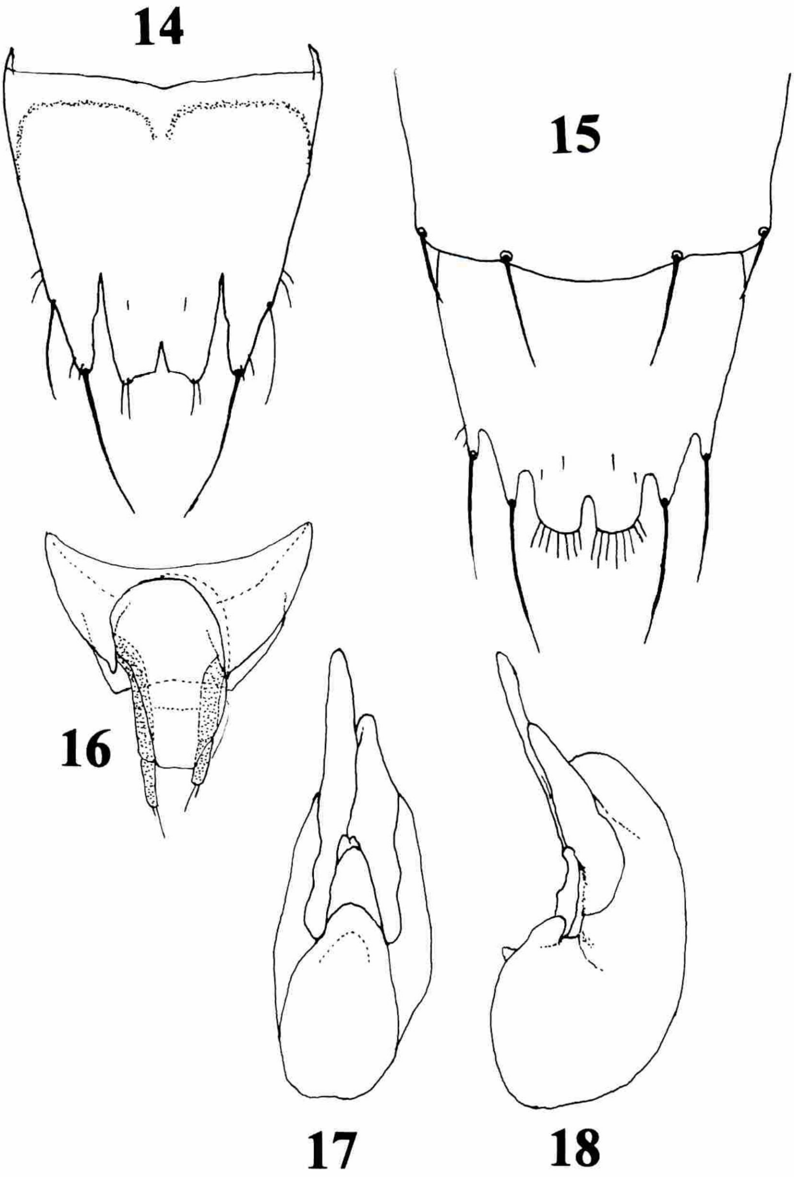


Figs. 10–13. *Paratachinus yamato* sp. nov., male. — 10, 10th tergite; 11, 6th to 8th sternites of abdomen; 12, 9th and 10th tergites; 13, 9th sternite.

9) with hind emargination rather deep but a little divergent posteriad, therefore the metacoxae are not so ill covered.

Abdomen linearly narrowed posteriad, with punctures rather coarse, sparse and elongate, larger than those on elytra, becoming smaller posteriorly in each segment and much larger on sternites than on tergites; 3rd tegite bearing a pair of small obscure tomentous flecks.

In male, 8th tergite (Fig. 10) quadrilobate; the inner lobes wide, short, with a fine short seta at each tip; outer ones small, like a small process, lying before the level of base of inner lobes and bearing a long bristle at the tip; 9th (Fig. 12) bearing 2 long bristles at the tip; 10th tergite (Fig. 12) elongate, subquadrate, nearly truncate at apex. Sixth sternite (Fig. 11) weakly and narrowly depressed along the middle, with fine short seta at each side of the depression near hind margin. Seventh sternite (Fig. 11) widely and rather deeply emarginate in the middle of hind margin, subtrapezoidally depressed before the emargination almost in full length, with a



Figs. 14–18. *Paratachinus yamato* sp. nov. — 14–16, female, 17–18, male genitalia. 14, 8th tergite; 15, 7th and 8th sternites of abdomen; 16, genital segments; 17, ventral view; 18, right lateral view.

long bristle beside the emargination, an additional short seta inside the bristle and with a long seta in latero-apical corner; the depression very coarsely and roughly punctured. Eighth sternite (Fig. 11) depressed and almost impunctate at base behind the emargination of the preceding sternite, quadrilobate, with a deep median excision which is narrow in basal half and wide in hind half; outer lobe small, rather similar to a tubercle in shape, lying at about the mid-level of the median excision the lobes bearing a long bristle at each tip. Ninth sternite (Fig. 13) slightly asymmetrical, obtrapezoidal and weakly arcuate at apical margin.

In female, 8th tergite (Fig. 14) trilobate, narrowly and deeply excised between inner lobe and outer lobes; inner lobe wide, gradually narrowed posteriad, widely emarginate at apical margin and with a narrow, sharp incision at the middle of the emargination, with a few short fine setae at each latero-apical angle; outer lobes slender, not reaching level of inner one, bearing a long bristle at each tip, with a small tubercle at ecto-lateral margin behind the level of extreme base of the excision. Seventh sternite widely and feebly produced posteriad at the middle of hind margin, with a long bristle at each side of the protuberance near hind margin and a short bristle near each posterior angle. Eighth sternite (Fig. 15) with 3 pairs of lobes, inner lobes of them rather wide, widest and longest in the three, rounded and with 7 or 8 short fine setae at each apex; intermediate lobes slender, reaching at about the level of base of inner lobe, with a long bristle at each tip; outer one nearly as long as intermediate one, not reaching to the level of base of intermediate one. Genital segment (Fig. 16) slightly asymmetrical, weakly sclerotized, semitransparent; 10th tergite transparent, somewhat pear-shaped, extending posteriad and reaching near apex of second gonocoxcite.

Legs stout, moderately long; fore tibiae with a few short spines in apical third; fore tarsi rather dilated in male than in female; middle tibiae with sparse and remarkable long spines; hind tibiae with several fine spines; 1st segment of hind tarsi two-thirds as long as the following 3 segments combined together.

Male genitalia (Figs. 17, 18) subfusiform, asymmetrical, rather strongly curved ventrad in lateral view; penis elongate suboval in ventral view, somewhat reniform in lateral view weakly sclerotized and semitransparent on the dorsum; parameres deeply bilobate, much more extending beyond penis, slightly laid to each other, rounded at each apex, left lobe much longer and less steep for penis than right one.

Holotype: ♂, Dorogawa, Mt. Ohmine, Nara Pref., Japan, 24. VIII. 1991, T. ITO leg. (In the collection of Osaka Museum of Natural History). Allotype: ♀, same data as the holotype. Paratypes: 9♂♂, 2♀♀, same data as the holotype; same locality as the holotype, 1♂, 3. V. 1976, T. ITO leg.

Notes: The present species somewhat resembles *P. laticollis* in the coarse punctures on elytra and abdomen CAMERON but is easily distinguishable from the latter by darker coloration, secondary sexual features, structures of the mesosternum, etc. In *P. laticollis* the colour is wholly reddish, not darkened in head or abdomen, and mesosternum is devoid of a pair of carinae.

Etymology. The specific name "*yamato*" is derived from an ancient name of "Nara Prefecture", the type locality.

List of *Paratachinus* Species

Paratachinus laticollis CAMERON

(Figs. 1, 4, 6, 7)

Paratachinus laticollis CAMERON, 1932. Fn. Brit. India, III: 397; SCHEERPELTZ, 1934. Col. Cat., 139: 1508; — COIFFAIT, 1984:133.

Tachinus (*Tachinoderus*) *oblongopunctatus* ULLRICH, 1975: 313 **Syn. nov.**

LI and OHBAYASHI, 1996. Jpn. J. Ent., 64: 160; — HERMAN, 2001b. Bull. Amer. Mus. nat. Hist., 265: 972.

Distribution: India, Nepal.

Paratachinus monticola CAMERON
(Figs. 2, 5)

Paratachinus monticola CAMERON, 1932. Fn. Brit. Ind, III: 397; — SCHEERPELTZ, 1934. Col. Cat., 139: 1508.

Tachinus (*Tachinoderus*) *cameroni* ULLRICH, 1975: 314 Syn. nov.; — HERMAN, 2001b. Bull. Amer. Mus. nat. Hist., 265; 932.

Distribution: India.

Paratachinus latus COIFFAIT

Paratachinus latus COIFFAIT, 1982. Senkenbelgiana biol., 62: 116; — 1984: 117.

Tachinus patulus HERMAN, 2001b. Bull. Amer. Mus. nat. Hist., 265: 975. **Syn. nov.**

Distribution: Nepal.

Paratachinus nepalicus COIFFAIT

Paratachinus nepalicus COIFFAIT, 1982. Senkenbergiana biol., 62: 116–117.

Tachinus nepalicus: HERMAN, 2001b. Bull. Amer. Mus. nat. Hist., 265: 970.

Distribution: Nepal.

Paratachinus yamato sp. nov.

Described in present issue.

Distribution: Japan.

要　　約

林　靖彦：*Paratachinus* ヒメマルクビハネカクシ属（新称）覚え書きと日本産 1 新種の記載．————ヒメマルクビハネカクシ属は，従来インド北部からネパールにかけてのみ知られている属で，*Tachinus* マルクビハネカクシ属の *Tachinoderus* 亜属のシノニムとされていた．筆者はロンドンの自然史博物館から *Paratachinus* 属のタイプ種 *P. laticollis* CAMERON 及び *P. monticola* CAMERON のタイプ標本を借用し詳しく調べることができた．その結果，*Paratachinus* 属は *Tachinoderus* 亜属のシノニムではなく，独立属とすべきであると言う結論に至った．また，研究仲間の伊藤建夫氏採集の標本中に日本産の本属の種と思われる一連の標本を見いだし，調べた結果，中胸腹板の構造に若干の差異をみとめるが，基本的には同じ属と考えられたので *Paratachinus yamato* sp. nov. と命名記載した．

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Ent. Rev. Japan, **58** (2): 143–150, Oct. 30, 2003

A New Genus, *Parabradycellus*, and Two New Species of the Subtribe Stenolophina (Coleoptera: Carabidae: Harpalini) from Asia

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1–7–18 Higashiuneno, Kawanishi City, Hyôgo Pref., 666–0117 Japan

Abstract A new genus closely related to the genus *Bradycellus* is described from Asia under the name, *Parabradycellus* and two new species of the new genus, *P. convexus* N. ITO, sp. nov. and *P. indicus* N. ITO, sp. nov. are described from Vietnam and from India, respectively. Also a note on taxonomic position of *Parabradycellus yunnanus* (JEDLIČKA) (= *Bradycellus yunnanus* (JEDLIČKA)) is given and it is transferred to the new genus.

The genus *Bradycellus* and related genera and subgenera are well diversified in world-wide. But, the chaetotaxy of the 2nd segments of labial palpi and of the ligula are constant characteristics and usually bisetose each. The former characteristic having the labial 2nd segment bisetose is very important and characterizes the subtribe Stenolophina. Recently I obtained opportunity to examine strange examples, which must be certainly situated near *Bradycellus* and the related genera because of the toothed mentum and other general characteristics, but the chaetotaxy mentioned above is unique among the known genera and sufficient to establish a new genus.

On the other hand, taxonomic status of *Bradycellus yunnanus* (JEDLIČKA) has not been cleared yet. The species was described as new species of *Tachycellus* by JEDLIČKA (1931). After that, CSIKI (1932) transferred it to *Bradycellus*, because *Tachycellus* was treated as a subgenus of *Bradycellus*. JAEGER *et al.* (1994, 1995) discussed its taxonomic position and mentioned that the species does not belong to the subgenus. *Tachycellus* at least, though the subgeneric position was not clear at that time. After close re-examination of the chaetotaxy on palpi and ligula, I conclude the taxonomic status of the species, "*yunnanus*" that it should be transferred to new genus.

In this paper, I am going to propose a new genus, *Parabradycellus* and to describe two new species of the genus and to transfer the species "*yunnanus*" to the new genus. Before going further in detail, I wish to express my cordial thanks to Drs. Aleš SMETANA and Yves BOUSQUET of the Agriculture and Agri-Food Canada, Ottawa, Dr. Joséf JELÍNEK of the National Museum, the Natural History Museum, Praha, Dr. M. BRANCUCCI of the Naturhistorisches Museum, Basel, Dr. Ottó MERKL of the Hungarian National Natural History Museum, Budapest and Dr. Masataka SATÔ, Nagoya for their kindly offering many invaluable material. Also I heartily thank Dr. Bernd JAEGER, Berlin for his giving important information about material and leaving the interesting study to me. The abbreviations of depositories are employed as following: AAFC (the Agriculture and Agri-Food Canada, Ottawa), NHM (the National Museum, the Natural History Museum, Praha), NM (the Naturhistorisches Museum, Basel), HNNHM (the Hungarian National Natural History Museum, Budapest), and NSM (the Natural Science Museum (Nat.

Hist.), Tokyo), and NIc (the author's collection).

Parabradycellus N. ITO, gen. nov.

(Fig. 1)

Type species: *Parabradycellus convexus* N. ITO, sp. nov.

Body similar in general appearance to subgenus *Tachycellus* of the genus *Bradycellus*, glabrous dorsally. Head rather convex. Clypeal suture clearly carved. Frontal impressions deep. Antennae more sparsely pubescent in 3rd segments than usual. Mandibles clearly curved, sharpened at apex. Setae of second labial palpus (Fig. 1) more than two in number. Ligula (Fig. 1) bisetose just behind apex and additionally with two short and fine setae at apex of dorsal surface. Mentum clearly sutured with submentum which is bisetose at each side; median tooth present, one setae at each sides of base. Pronotum unisetose at apical fourth of each side. Elytra bearing a setiferous pore on each 3rd interval. Scutellar steriole present, with a basal pore at each base. Marginal series divided into three groups, two hind groups narrowly separated from each other. Abdominal sternites sparsely pubescent, with a densely pubescent concave medially on 2nd and 3rd sternites. Tarsi glabrous dorsally; mid tarsi of male without adhesive ventral hairs.

Remarks: This new genus is related to the genus *Bradycellus* in having such shared characteristics as the toothed mentum, concaved 2nd and 3rd sternites of abdomen, etc., but the setae on 2nd palpus are more than two in number and the ligula is quadrisetose. Since these characteristics are unique among the genera of the subtribe Stenolophina so far recognized, *Parabradycellus* is preferable to be treated as a full genus rather than a subgenus of *Brady-*

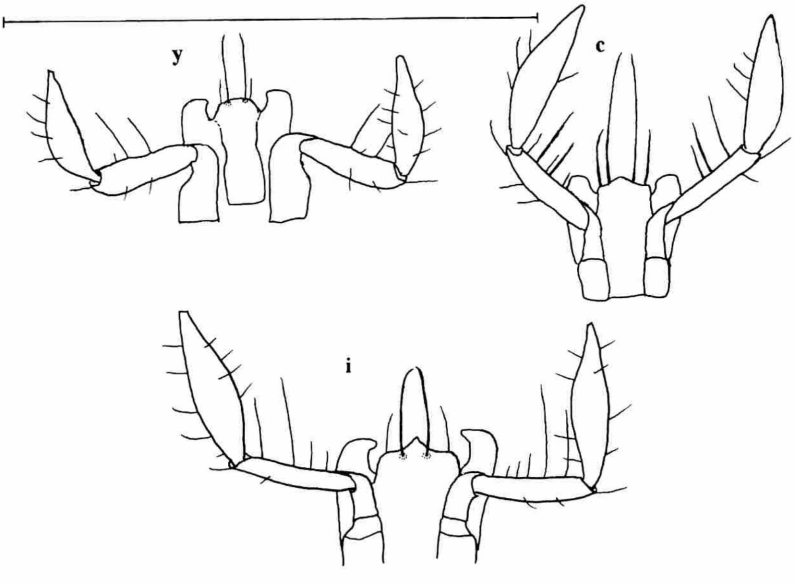


Fig. 1. Labial palpi, ligula and paraglossae of *Parabradycellus* spp. — y, *Parabradycellus yunnanus* (JEDLIČKA); c, *P. convexus* N. ITO, sp. nov.; i, *P. indicus* N. ITO, sp. nov. Scale: 1.0 mm.

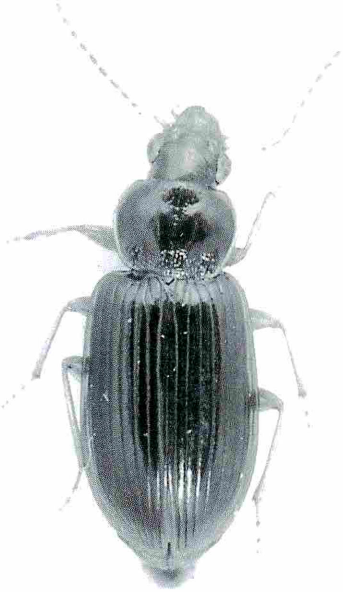


Fig. 2. Habitus of *Parabradycellus yunnanus* (JEDLIČKA)

cellus. The genus consists of three species, *Parabradycellus convexus* N. ITO, sp. nov., *P. indicus* N. ITO, sp. nov. (both species are described below), and *P. yunnanus* (JEDLIČKA).

Etymology. The generic name consists of Para and bradycellus. Para is derived from para in Greece and means near. *Bradycellus* is known harpaline genus. Gender is mascline.

Parabradycellus yunnanus (JEDLIČKA), **comb. nov.**

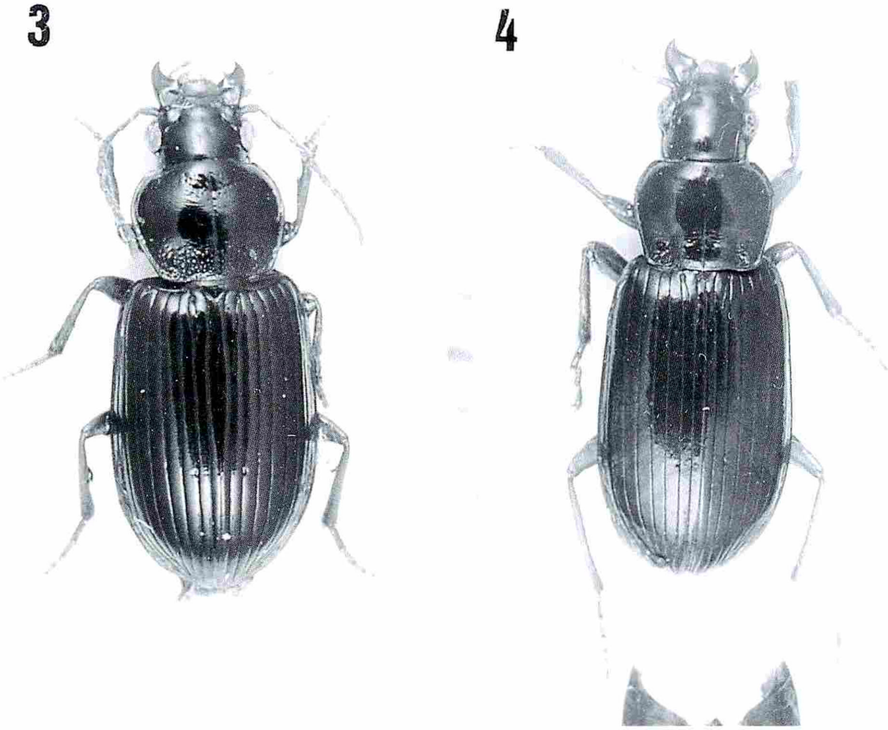
(Figs. 1–y, 2 and 5–fy)

Tachycellus yunnanus JEDLIČKA, 1931. Časopis čsl. Spol. Entomol., 5–6: 103–104.— JEDLIČKA, 1953. Ent. Blätt. 49: 143.
Bradycellus (*Desbordesius*) *yunnanus*: CSIKI, 1932, Coleopter. Cat., 121: 1227.
"*Tachycellus yunnanus*: JAEGER and WRASE, Linzer biol. Beitr., 26: 489.
Bradycellus yunnanus: JAEGER and WRASE, Linzer biol. Beitr., 27: 312–313.

Specimens examined: 5♂♂, 8♀♀, Pangma, alt. 1,700 m, Khandbari Distr., Nepal, 4. IV. 1982, A. SMETANA leg. (preserved in AAFC and NIc); 1♂, Chingdong, alt. 1,200 m, Yunnan, 18. IV. 1957 (NIc).

Distribution: Yunnan, Vietnam, Myanmar, Laos, Nepal.

Remarks: In this species, the 2nd segment of labial palpus bears two long and a few fine and short setae, of which the latter setae are only observed by close examination. The same is true for the two short setae on the dorsal side of ligula besides conspicuous pair. These conditions must be the reason to have been treated the present species in the genus *Bradycellus*.



Figs. 3 and 4. Habitus of *Parabradycellus* spp. 3, *Parabradycellus convexus* N. ITO, sp. nov.; 4, *P. indicus* N. ITO, sp. nov.

Parabradycellus convexus N. ITO, sp. nov.

(Figs. 1–c, 3, 5–m and 5–fc)

Body oblong, rather well convex, slightly brownish black, not iridescent dorsally; buccal part and tarsi yellowish brown, labrum, antennae, lateral margins of pronotum, femora and tibiae light brown, mandibles dark reddish brown.

Head large, nearly three-fifths the pronotal width, well elevated on vertex, sparsely and microscopically punctate; labrum weakly trapezoidal, weakly emarginated apically; clypeus weakly produced and rounded at apical corners; clypeal suture arcuate; frontal impressions linearly divergent behind and reaching supraorbital grooves; eyes large and hemispherical; temples very short, steeply convergent behind; genuine ventral margins of eyes adjoining buccal fissure; labial palpi slender, 3rd segment as long as the 2nd; ligula gently dilated distad, triangular at apex; microsculptures visible as mixture of isodiametric and subtransverse meshes.

Pronotum subquadrate, evenly convex, widest at apical two-fifths, 1.31–1.39 times as wide as long, widely smooth on central area and coarsely punctate near middle of apex and in basal foveae; sides fairly arcuate apicad and sublinearly oblique basad from the widest point, more or less widely reflected; apex straight, finely bordered laterally; base approximately as wide as apex, feebly arcuate, unbordered lengthwise; apical angles not protrudent, narrowly rounded; basal angles wider than rectangle, rather widely rounded; lateral furrows carved in a line throughout; basal foveae small, rounded, and somewhat clear; front transverse impression wide and shallow, the hind one obsolete; median line relatively deep, reaching base and reduced just before apex, with several punctures; microsculptures mostly observed as transverse meshes and as isodiametric meshes near punctures on apex and basal foveae.

Elytra widely oblong, 1.47–1.54 times as long as wide, fairly convex, without punctures; sides strongly curved at humeri, slightly divergent backwards in middle, gradually strongly convergent distad from apical third, shallowly sinuate preapically; apices very widely arcuate at margins, moderately rounded at tips which are narrowly separated from each other; bases moderately emarginate, very widely and hardly angulate at humeral angles; striae deep and finely crenulate, scutellar striole of moderate length; intervals gently raised throughout, with a setiferous pore situated a little before apical two-fifths; fore group of marginal series composed of 6 umbilicate pores, middle one of 3–4 pores and hind one of 4 pores; microsculpture clearly visible as transverse meshes. Hind wings entire.

Ventral surface not punctate, densely pubescent on 4th to 6th abdominal sternites; metepisternum elongate, well contracted backwards, a half longer than wide; 6th abdominal sternite in both sexes widely arcuate.

Hind femora bisetose along hind margin; fore tibiae slender and without sulcus, terminal spur short and lanceolate; hind tarsi 0.85–0.88 times in male and 0,75–0.77 times in female as long as the width of head, 1st segment one-seventh shorter than the 2nd and 3rd taken together, 2nd one-third longer than the 3rd and twice the 4th, claw segment unisetose along each ventral

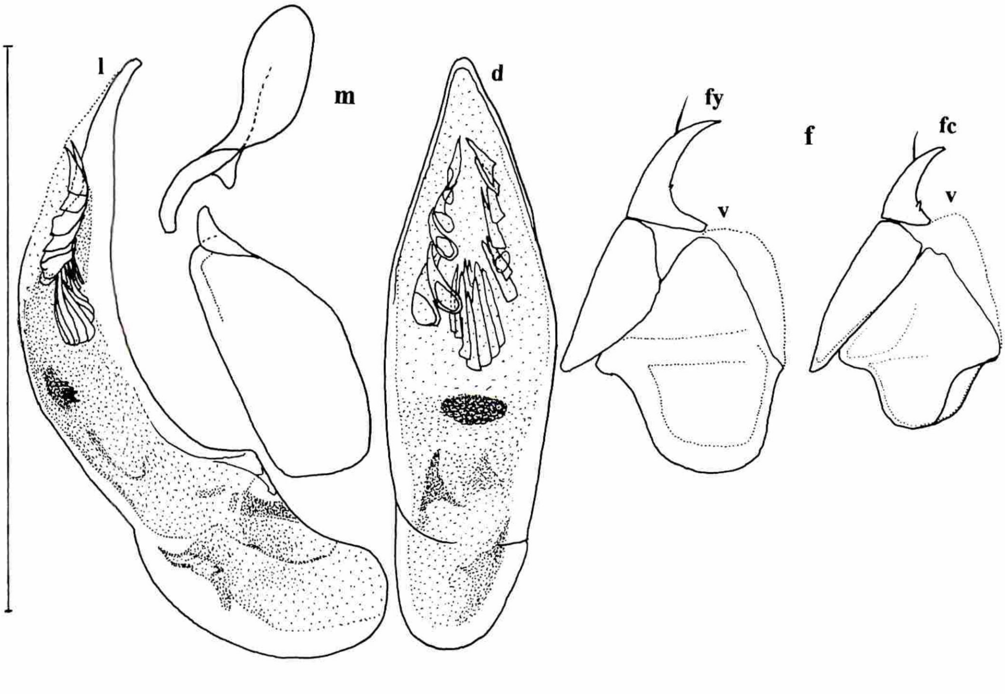


Fig. 5. Genitalia of *Parabradycellus* spp. m, male genitalia; f, female genitalia; l, lateral aspect; d, dorsal aspect; v, ventral aspect; m and fc, *Prabradycellus convexus* N. ITO, sp. nov.; fy, *P. yunnanus* (JEDLIČKA). Scale: 1.0 mm.

margin.

Aedeagus (Fig. 5-m) gently curved, gradually thinned apicad; apical lobe very small; apical orifice wide, inner sac armed with two seriate clusters of elongate conical sclerites in apical half, one cluster of peg-shaped sclerites between the former clusters, and one cluster of small compact sclerites behind those cluster. Stylus (Fig. 5-fc) rather slender, moderately curved, with a very small spine on basal third of ventral margin; basal segment and valvifer without any setae.

Holotype: ♂, Quang Chu, alt. 150 m, at light, Bac Thai Prov., Vietnam, 2–3. XII. 1993, BAVCOVICS and CSORBA leg. (preserved in NHM). Paratypes: 2♀♀, same data as the holotype (preserved in NHM and NIc); 1♂, Yen Bai, North Vietnam, 6–25. V. 1990, O. ŠAUŠA leg. (preserved in NM); 1♂, Ao Vua (alt. 70–220 m), North Vietnam, 27. VI. 1995, M. SATÔ leg. (preserved in NSM).

Remarks: This new species is similar to *Parabradycellus yunnanus* (JEDLIČKA), but is distinguished from the latter by the microsculpture more obscure on dorsum, the head more deeply engraved at frontal impressions, and the pronotum more widely reflected at sides and more widely rounded at basal angles.

Etymology. The specific name is derived from Latin convexus and means convex in allusion to convex pronotum.

Parabradycellus indicus N. ITO, sp. nov.

(Figs. 4 and 6)

Body narrowly oblong, barely brownish black, shiny, with very slightly iridescent lustre on elytra; palpi, buccal part, lateral margins of pronotum and legs light reddish brown, mandibles and sutural intervals dark reddish brown.

Head fairly elevated at vertex, large, nearly three-fourths the pronotal width, with very sparse and microscopic punctures; labrum similar to that of the previous new species; clypeus slightly emarginate at apex; frontal impressions sublinear, a little shallower than those of the previous species; eyes large, well prominent; temples each very short, forming an acute angle with neck constriction, with sparse pubescence; genuine ventral margin of eyes narrowly isolated from buccal fissure; antennae reaching basal tenth of elytra, 2nd segment bearing several pubescence in addition to ordinary setae, 3rd as long as the 4th and one-third longer than the 2nd; labial palpi slender, 3rd segment slightly longer than the 2nd; ligula rather wide, minutely and triangularly protuberant at middle of apex; paraglossae reaching at ligular apex; epilobes of mentum not widened; microsculpture clearly observed as isodiametric meshes.

Pronotum subcordiform, widest at apical two-fifths, one-third wider than long, mostly smooth, coarsely punctate in basal foveae, a part of whose punctures are confluent, and with convexity so widely occupying that lateral furrows are very narrow lengthwise; sides narrowly reflected, clearly arcuate from apex to the widest point, thence linearly convergent basad, feebly sinuate before base; apex shallowly emarginate, with border medially interrupted; base 1.24 times as wide as apex, weakly arcuate at each lateral fourth where border is present; apical angles weakly produced and narrowly rounded; basal angles wider than rectangle, barely prominent and subacute at tips; basal foveae each small, rounded, and with a large and slight swell; front transverse impression vague, the hind one obsolete; median line not reaching apex, gradu-

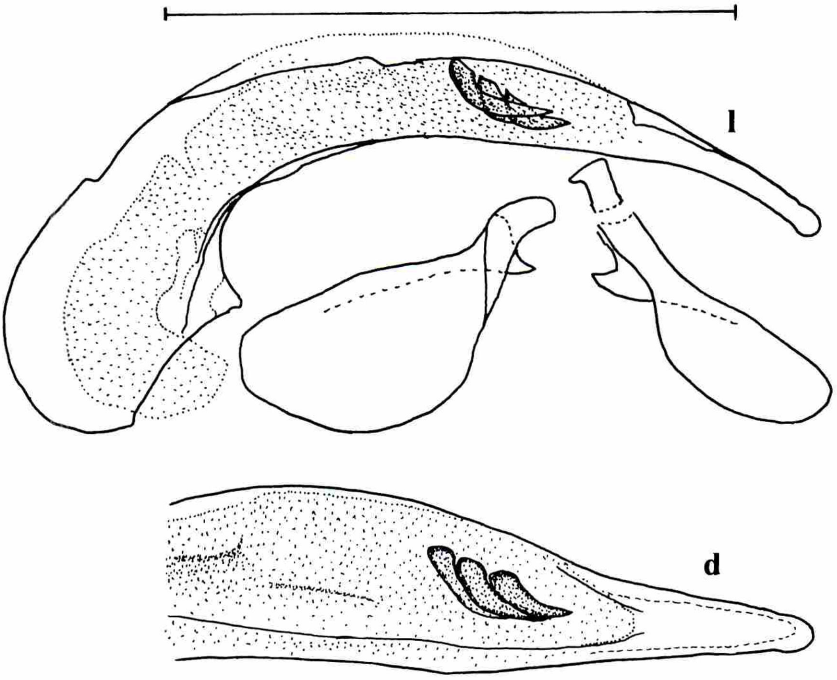


Fig. 6. Male genitalia of *Parabradycellus indicus* N. Ito, sp. nov. — l, lateral aspect; d, dorsal aspect. Scale: 1.0 mm.

ally deepened towards base; microsculpture clear, mostly consisting of transverse meshes and of mixtures with square and isodiametric meshes in apical area and basal foveae.

Elytra oblong, slightly widened backwards to apical third, 1.41 times as wide as the pronotal width and 1.52 times as long as wide, gently convex, with more or less deep preapical sinus; humeri clearly arcuate, very obtuse and angulate at its angles; apices somewhat produced backwards, moderately rounded and rather widely separated from each other at tips; striae moderate in depth, though clearly visible due to both edges acute; intervals flattened throughout, a discal pores on 3rd interval situated near apical two-fifths and adjoining 2nd stria, scutellar striole somewhat long; marginal series consisting of 6 + 4 + 5 umbilicate pores; microsculpture clearly impressed as transverse meshes. Hind wings fully developed.

Ventral surface impunctate, densely pubescent on 3rd to 6th abdominal sternites; metepisternum elongate, well convergent behind, two-thirds longer than wide; 6th abdominal sternite in male widely arcuate.

Hind femora bisetose at hind margin; fore tibiae each unispinose apico-externally and without sulcus, terminal spur short and simple; hind tarsi in male 0.92 times as long as the width of head, 1st segment 0.82 times as long as the 2nd and 3rd taken together, 2nd two-sevenths longer than the 3rd and twice the 4th, claw segment bisetose along each ventral margin.

Aedeagus (Fig. 6) moderate in robustness, gently curved, gradually thinned apicad from middle, roundly thickened at tip; apical orifice widely opening, inner sac bearing three stout and elongate sclerites; ventral surface ridged at sides, shallowly depressed.

Female unknown.

Holotype: ♂, Jabarpur, alt. 1,600 ft, Central India, XI. 1957. With a separate pink label described as "*Bradycellus* sp." by hand writing and as "A. EDLIČKA det." by machine print). (Preserved in NHM).

Remarks: This new species is distinct in combination of the large and brownish body and the subcordiform pronotum among species of the genus *Bradycellus* and related genera in addition to the generic characteristics. The new species resembles in color and general shape to *Bradycellus* (*Trillarthrus*) *atrimedus* (Say), but the head bears the frontal impressions not shallowed even near eyes, the 3rd antennal segments are not glabrous, and the elytra are shorter. The new species is somewhat similar in the pronotal shape to *Bradycellus* (*Bradycellus*) *verbosci* (Duftschmidt), but is easily distinguished from the latter by the body much larger in size, darker in color and less shiny, eyes larger, and the microsculpture much more clearly impressed.

In general appearance the new species is different from *P. yunnanus* and *P. convexus* which are similar in shape of body to each other. But, the apical shape of ligula and length of setae of 2nd labial palpi in *P. indicus* is similar to *P. convexus* and therefore *P. convexus* and *P. indicus* must be closely related in phylogenetic positions.

Etymology. The specific name is derived from country's name of the type locality, India.

要　　約

伊藤　昇：Stenolophina亜族の1新属*Parabradycellus*と2新種について.――― Stenolophina 亜族のインド産1新種を属模式種として新属 *Parabradycellus* を記載した．本属は下唇歯を持つこと，第2－3腹版に微毛を有するくぼみを持つこと，前胸背基部に剛毛がないことから*Bradycellus*およびその近縁属の系統であるが，舌が腹面先端の2剛毛に加え背面先端にも2剛毛を有する点および下唇枝第二節に3本以上の剛毛を有する点で既知属とは異なる．同時に本属に属する2新種を，*Parabradycellus convexus* および *P. indicus* と命名し，それぞれベトナムおよび中央インドから記載した．なお，従来 *Bradycellus yunnanus* (Jedlička) とされていた種は，再精査の結果，本属と同じ特徴を有することから *Parabradycellus yunnanus* (Jedlička) として本属に移した．*P. convexus* は *P. yunnanus* と体型は類似しているが，舌先端の形状や下唇枝第二節の剛毛が長い点が *P. indicus* と共通しており，後者に近縁と思われる．

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Notes on the Buprestid Beetles (Coleoptera: Buprestidae) from Thailand, V.

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Sumiyoshi 1–12–4, Ami-machi, Inashiki-gun, Ibaraki-ken 300–1151, Japan

Abstract A new species and a new subspecies are described under the name of *Megaloxantha longiantennata* sp. nov. and *Chrysochroa rajah wiwuti* subsp. nov., respectively. In addition, *Megaloxantha porphyreus* HOU et WU, 1996 from North Vietnam is treated as a synonym of *Megaloxantha brunnea* (E. SAUNDERS, 1866) from North Thailand.

In continuation with our previous paper (AKIYAMA and OHMOMO, 1994) on the buprestid beetles from Thailand, I will describe one new species and one new subspecies. The source collections or present depositories of specimens are listed as follows in parentheses, preceded by abbreviations used in this paper: NSMT (National Science Museum (Nat. Hist.), Tokyo) and COTJ (collection of S. OHMOMO, Tsukuba, Japan). The body size is formulated as minimal-maximal length and width. Other abbreviations used for the proportional rate between maximal length (L) and maximal width (W). Photographs inserted in this paper are taken by Dr. Yoshio HIRAI, National Institute of Agrobiological Resources, Tsukuba, Japan.

Holotypes are deposited in the collection of NSMT.

Megaloxantha longiantennata sp. nov.

(Figs. 1a, 1b)

Type series. Holotype: ♂, NSMT, V. 1987, Sansai, Chiang Mai Province, North Thailand. Paratypes: 2♂♂, COTJ, VI. 1987, Chiang Mai Province, North Thailand; 1♂, COTJ, 20. VII. 1987, Nan Province, North Thailand; 1♂, COTJ, 10. VII. 1990, Sansai, Chiang Mai Province, North Thailand; 5♂♂, 3♀♀, COTJ, 25. VI. 1993, Sansai, Chiang Mai Province, North Thailand; 1♂, COTJ, 12. VIII. 1993, Sansai, Chiang Mai Province, North Thailand; 5♂♂, 1♀, COTJ, Maemo, Lampang Province, North Thailand; 4♂♂, 2♀♀, COTJ, 20. VI. 1997, Sansai, Chiang Mai Province, North Thailand.

Description. Size 58.6–67.7 × 19.1–22.6 mm. Holotype: 61.3 mm in length and 19.8 mm in width. Body above usually shining bluish green (Fig. 1a), rarely bluish purple or blackish purple (Fig. 1b); latero-pronotal large swellings yellowish brown; elliptical ivory markings on elytra surrounded dark blue shade; antennae bluish black in 1st to 3rd segments and brown, sometimes partly black shade, in 4th to 11th segments. Body beneath dark greenish blue except prosternal process, mesosternum, almost of metasternum, coxae and all of abdoninal sternites yellowish brown. Legs metallic dark blue.

Head slightly wider than the anterior margin of pronotum, obviously narrower than the

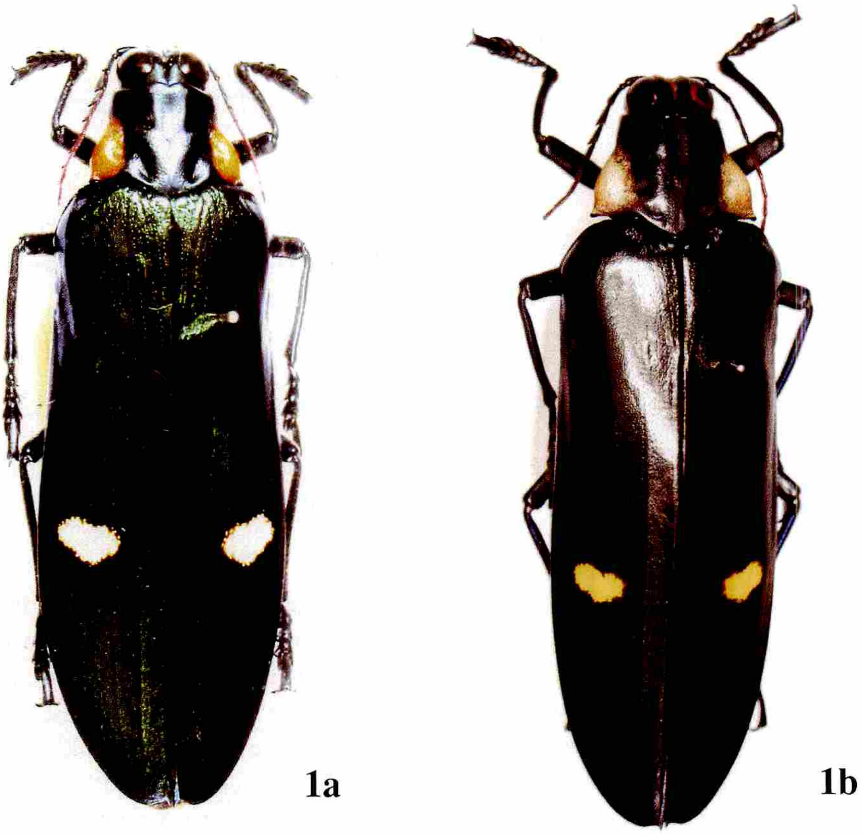

Fig. 1. Habitus of *Megaloxantha longiantennata* sp. nov. — 1a. holotype; 1b. paratype.

posterior margin of pronotum. Eyes slightly convex, regularly elliptical, convergent to vertex. Frons with a deep longitudinal groove running from the vertex to the middle of frons, densely and strongly punctate. Clypeus transverse and marginate, with dense punctures. Antennal cavities rounded. Antennae serrate from 4th segment, 10th and 11th segments over the posterior angle of pronotum in male and 11th segment over the posterior angle of pronotum in female, the segment 2nd < 1st ≦ 3rd.

Pronotum widest at basal four-fifths (L/W = 0.71); anterior margin slightly bisinuate with a small incision at the middle; sides with two large swellings along the lateral sides, straight in the anterior two-fifths and swollen in the posterior three-fifths, bordered by a carina at basal half; posterior angles acute and sharply pointed; posterior margin bisinuate. Surface with an inconspicuous median groove and two small shallow elliptical depressions at the base; disc smooth, shining, irregularly and finely punctate with rather larger punctures coarsely except along the lateral sides where the punctures are rough and dense. Scutellum not visible. Prosternal process smooth, triangular at apex; sides weakly curved to inside.

Elytra convex, widest at the basal two-thirds (L/W = 2.45); base wider than the posterior margin of the pronotum; sides obliquely truncate to humeri, which are angulated and expanded, sinuate to the posterior third, where they are expanded and broadly rounded, then arcuately attenuate to apices, which are dentate at the sutural angle; disc with four weak costae; surface finely and densely punctured; markings small and transverse, sometimes oblique, never in touch with the 1st costa and 4th costa.

Body beneath punctate sparsely and finely, with inconspicuous silver-grayish hairs sparsely; apex of the last ventral abdominal sternite broadly, shallowly and triangularly emarginate in male or rounded with a small obsolete incision at the middle in female.

Sexual dimorphism. Female very similar to male except body shape rather robust and antennae short.

Distribution. North Thailand.

Etymology. All of the hitherto known species belonging to the genus *Megaloxantha* have the antennae of which the 11th segment is laid over the posterior angle of pronotum. However, this new species has a long antennae of which 10th and 11th segments are laid over the posterior angle of pronotum. So, the specific name, *longiantennata*, is given to this new species.

Remarks. This species is very similar to *M. brunnea* (E. SAUNDERS, 1866), but it is distinguished from this by the following points: 1) body beneath usually dark greenish blue, while in *brunnea* it is usually purplish brown to purplish black; 2) elytral markings small and transverse, while in *brunnea* it is also small but rounded; 3) antennae long and 10th and 11th segments over the posterior angle of pronotum in male, while in *brunnea*, only 11th segment over the posterior angle of pronotum in male.

Megaloxantha brunnea (E. SAUNDERS, 1866)

Chrysochroa bicolor var. *brunnea* E. SAUNDERS, 1866: 300.
Chrysochroa (Megaloxantha) bicolor var. *brunnea*: KERREMANS, 1908: 24.
Megaloxantha bicolor brunnea: Y. KUROSAWA, 1978b: 216.
Megaloxantha brunnea: S. ENDO, 1995: 10.
Megaloxantha porphyreus HOU et WU, 1996: 1. **Syn. nov.**

Distribution. North Thailand, North Vietnam.

Remarks. Body surface is purplish brown and sometimes with purplish black except yellowish orange tuberculus on the lateral sides of pronotum and elytral markings which are ivory and surrounded with dark blue shade. On the description of *M. poryphyreus* from North Vietnam, HOU and WU (1996) compared it with only *M. bicolor bicolor* (FABRICIUS, 1778) having shining green body and distributing in West Java. They did not compare it, however, with *M. brunnea* having purplish brown body and distributing in North Thailand. In this comparison, they suggested the main characteristics of the specimens from the north Vietnam based on their body coloration and described a new species under the name of *M. poryphyreus*. Their suggestions were the same with the characteristics of *M. brunnea* from the north Thailand. No doubt this species is a synonym of *M. brunnea*.

In addition, the fauna of the genus *Megaloxantha* in north Thailand is regarded as four species, *gigantea* (SCHALLER, 1783), *brunnea* (E. SAUNDERS, 1866), *mouhotii* (E. SAUNDERS, 1869) and *longiantennata* sp. nov.

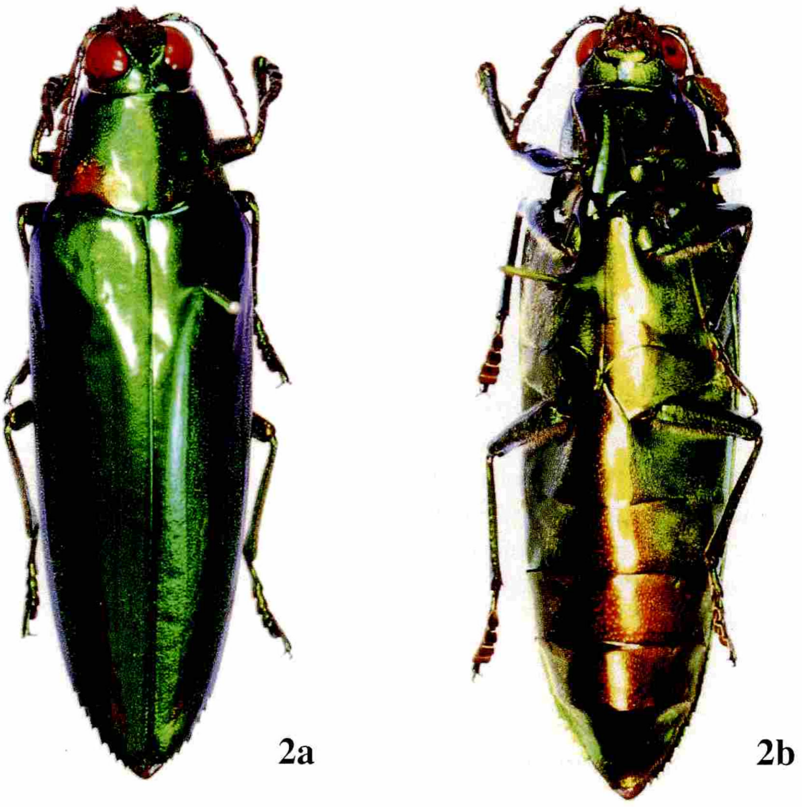

Fig. 2. Habitus of *Chrysochroa rajah wiwuti* subsp. nov. — 2a. dorsal view, holotype; 2b. ventral view.

Chrysochroa rajah wiwuti subsp. nov.

(Figs. 2a, 2b)

Type series. Holotype: ♀, NSMT, 23. V. 2002, Khao Soi Dao, Chanthaburi Province, East Thailand, S. OHMOMO leg. Paratypes: 5♂♂, 1♀, COTJ, the same data as the holotype; 1♂, 1♀, COTJ, 15. V. 2003, Khao Soi Dao, Chanthaburi Province, East Thailand, S. OHMOMO leg.; 2♂♂, COTJ, 20. V. 2002, Khao Kitchakul, Chanthaburi Province, East Thailand, S. NAKAMURA leg.; 1♀, COTJ, 18. V. 2003, Ban Koom, Wang Nam Khaew, Nakhon Ratchasima Province, NE-Thailand, S. NAKAMURA leg.; 2♂♂, COTJ, 15. V. 1985, Koh Anem, Ban Rai, Kanchanaburi Province, West Thailand, S. OHMOMO leg.; 1♂, COTJ, 13. IX. 1973, Bangkhen, Bangkok, Central Thailand.

Description. Size 36.2–44.5 × 11.3–13.9 mm. Holotype: 40.4 mm in length and 12.8 mm in width. Body above brighter, brilliant deep green with bluish tinge, especially around head and anterior half of pronotum. Body beneath golden green except the middle of abdominal sternites 1–2 and whole of abdominal sternites 3–5 cupreous red. V-shape sculpture on vertex deep and shape, but not over the end line of eyes. Elytra finely and densely with two kinds of punctures;

elytral longitudinal red bands distinct.

Sexual dimorphism. Male very similar to female except body shape rather slender.

Distribution. East and Central Thailand.

Etymology. This subspecific name is dedicated to Dr. Wiwut DAENGSUBHA of Kasetsart University, Thailand, who led me to many fields and gave me opportunities to find this new subspecies.

Remarks. This subspecies is very similar to subspecies *thailandica* Y. KUROSAWA, 1978a from the north Thailand, but it is separable from this by the following points: 1) V-shape sculpture on vertex not over the end line of eyes, while in *thailandica*, it reaches to the end line of eyes. 2) around head and anterior half of pronotum brilliant deep green with bluish tinge (Fig. 2a), while in *thailandica*, it is without bluish tinge, rather golden green. 3) middle of abdominal sternites 1–2 and whole of abdominal sternites 3–5 cupreous red (Fig. 2b), while in *thailandica*, whole of abdominal sternites cupreous red.

It is very interesting that two separable populations are distributing in Thailand (northern part and eastern part). CHUNRAM (1974) reported the distribution of *C. rajah* (as *Chrysochroa chinensis*) in Thailand as follows: north Thailand (Chiang Mai Province, Phrae Province), north-east Thailand (Nakhon Ratchasima Province,), central Thailand (Kanchanaburi Province, Prachuap Khiri Kharn Province, Phetchaburi Province, Saraburi Province), east Thailand (Chanthaburi Province) and south Thailand (Nakhon Si Thamarat Province, Trang Province). I had not any opportunity to examine these specimens, but am interest in what characteristics are observed in the population distributing in the southern part of central Thailand and south Thailand as my future plan for study.

要　　約

大桃 定洋：タイ産タマムシ科甲虫 (第５報). ——— タイ産タマムシ科甲虫として，北部タイからオオルリタマムシ属の１新種 *Megaloxantha longiantennata* sp. nov.を記載した．また，北ベトナムから記載された *Megaloxantha porphyreus* HOU et WU, 1996 を北部タイから記載されていた *Megaloxantha brunnea* (E. SAUNDERS, 1866) の異名同種とした．他方，東部および中央部タイからルリタマムシ属の１新亜種 *Chrysochroa rajah wiwuti* subsp. nov. を記載した．この新亜種はタイ北部から知られる亜種 *thailandica* Y. KUROSAWA, 1978 とは明瞭に区別することができ，本種の分布拡大を知る上で興味深い存在と思われる．

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A New Species of the Genus *Heudister* from Indonesia (Coleoptera: Histeridae: Histerinae)

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Abstract *Heudister javanicus* from Java Island, Indonesia is described as new to science.

Key words: Indonesia, Coleoptera, Beetles, Histeridae, *Heudister*, new species

Recently I had opportunities to examine a series of histerid beetles in the collection of the Museum Zoologicum Bogoriense (MZB), Cibinong, Indonesia, and found a new species of the genus *Heudister* COOMAN from Java Island.

The genus *Heudister* was established by COOMAN (1940) for a single species from Tonkin (Hoabinh), Indochina (Vietnam) as a member of the Althanini in the subfamily Teretriinae. MAZUR (1984) synonymized the Althanini with the tribe Platysomatini. Recently ÔHARA and MAZUR (2002) revised the monotype species, *H. mieni*, and stated that *Heudister* is not related *Althanus* and was included in the tribe Exosternini. In the present report, I describe second species of the genus from Java Island, Indonesia, and also comment on some of its taxonomic characteristics.

Before going further, I would like to express my deep indebtedness to Drs. Haruo KATAKURA, Junichi KOJIMA, Sih KAHONO, Rosichon UBAIDILLAH, and Woro A. NOERDJITO for their collaboration during our investigation in Indonesia, especially, to Dr. Sri HARTINI for her kindness in giving me the opportunity to examine the specimens of MZB, and to Dr. Sławomir MAZUR, who commented on the original draft of this manuscript. This study was carried out with permission of the Lembaga Ilmu Pengetahuan Indonesia (LIPI) and was supported by a Grant-in-Aid for Scientific Research (No. 11691161 and 13839003) from the Japan Society for the Promotion of Science (JSPS).

Description and Notes

Tribe Exosternini

Genus *Heudister* COOMAN, 1940

Heudister COOMAN, 1940: 41 [type species: *Heudister mieni* COOMAN, 1940: 43]; ÔHARA and MAZUR, 2002: 2.

Notes. ÔHARA and MAZUR (2002) noted that the genus has all the principal characterstates of the tribe Exosternini, that is, the presence of a median mesosternal projection as well as undivided sutures of the antennal club and tibiae mulitdenticulate. However, I found a characteristic peculiarity to the species of the genus; that is, a labrum apparently with long setae on the anterior margin: 8 setae on *H. javanicus* and also, according to redescription, at least two setae on the *H. mieni*. Usually the members of the subfamily Histerinae have no seta on the anterior margin of the labrum, and its state is a useful key characteristic for distinguishing Histerinae from other subfamilies. Judging from only two representatives of the genus, the holotypes of the *H. mieni* (sex unknown) and *H. javanicus* (female), their external characteristics show that the genus matches up to the Histerinae, Exosternini except in regard to the state of labrum. In Ôhara's (1994) key to the subfamilies, the genus *Heudister* can be traced to the subfamily Tribalinae; however, members of the Tribalinae do not have such multidenticulate protibiae as those of the *Heudister*. Examination on the male genitalia of the genus will be helpful in understanding their taxonomical position. Thus far, the classification of the genus under the tribe is tentative.

Distribution. Vietnam, Indonesia (Java).

Heudister mieni Cooman, 1940

Heudister Cooman, 1940: 43, fig. 1–3 [Vietnam]; Ôhara and Mazur, 2002: 3 [redescription].

Distribution. Vietnam.

Heudister javanicus M. Ôhara, new species

Holotype. 1♀, "Leg. H. Lucht, K. O. Blawan, Idjen-Plateau, Java, 900–1500 m", "18–XII–1933 (hand writing)" (MZB).

Description. Body oblong-oval (Fig. 1A, 3A), strongly convex medially, light reddish brown and shiny; antennae, tibiae and tarsi yellowish brown. Body length* (male, in mm), PPL, 1.87; PEL, 1.68; APW, 0.67; PPW, 1.13; PL, 0.72; EL, 0.88; EW, 1.15; ProL, 0.46; ProW, 0.67; PyL, 0.41; PTL, 0.43; MSTL, 0.43; MTTL, 0.46.

Antennal club with two sutures (Fig. 2E), the suture indistinct medially. Eyes very large. Front of head slightly excavate; surface densely and coarsely punctate, the punctures separated by about half their diameter. Frontal and orbital striae of head (Fig. 2C) absent. Frontoclypeal suture weakly impressed. Labrum (Fig. 2F) transverse and short, the anterior margin round outwardly and with 8 yellow setae. One denticle present on inner margin of mandible; outer surface densely covered with coarse punctures.

Pronotal sides convergent forwards slightly on basal three-fourths, thence strongly convergent apically. Apical angle acute. Pronotum (Figs. 1A, 3A) strongly convex medially; marginal stria complete and deeply impressed laterally, absent anteriorly, its ventral edge cariniform; lateral pronotal stria absent. Surface of pronotum evenly covered with coarse punctures, the punc-

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* Measurements of some body parts are given in text. Abbreviations used in the measurements are as follows: PPL: length between anterior angles of pronotum and apex of pygidium, PEL: length between anterior angles of pronotum and apices of elytra, APW: width between anterior angles of pronotum, PPW: width between posterior angles of pronotum, PL: length of pronotum along mid line, EL: length of elytron along sutural line, EW: maximal width between outer margins of elytra, ProW: maximal width of propygidium, ProL: length of propygidium, PyL: length of pygidium, PTL: length of protibia, MSTL: length of mesotibia, MTTL: length of metatibia. See also Ôhara (1994: 8, fig. 2).

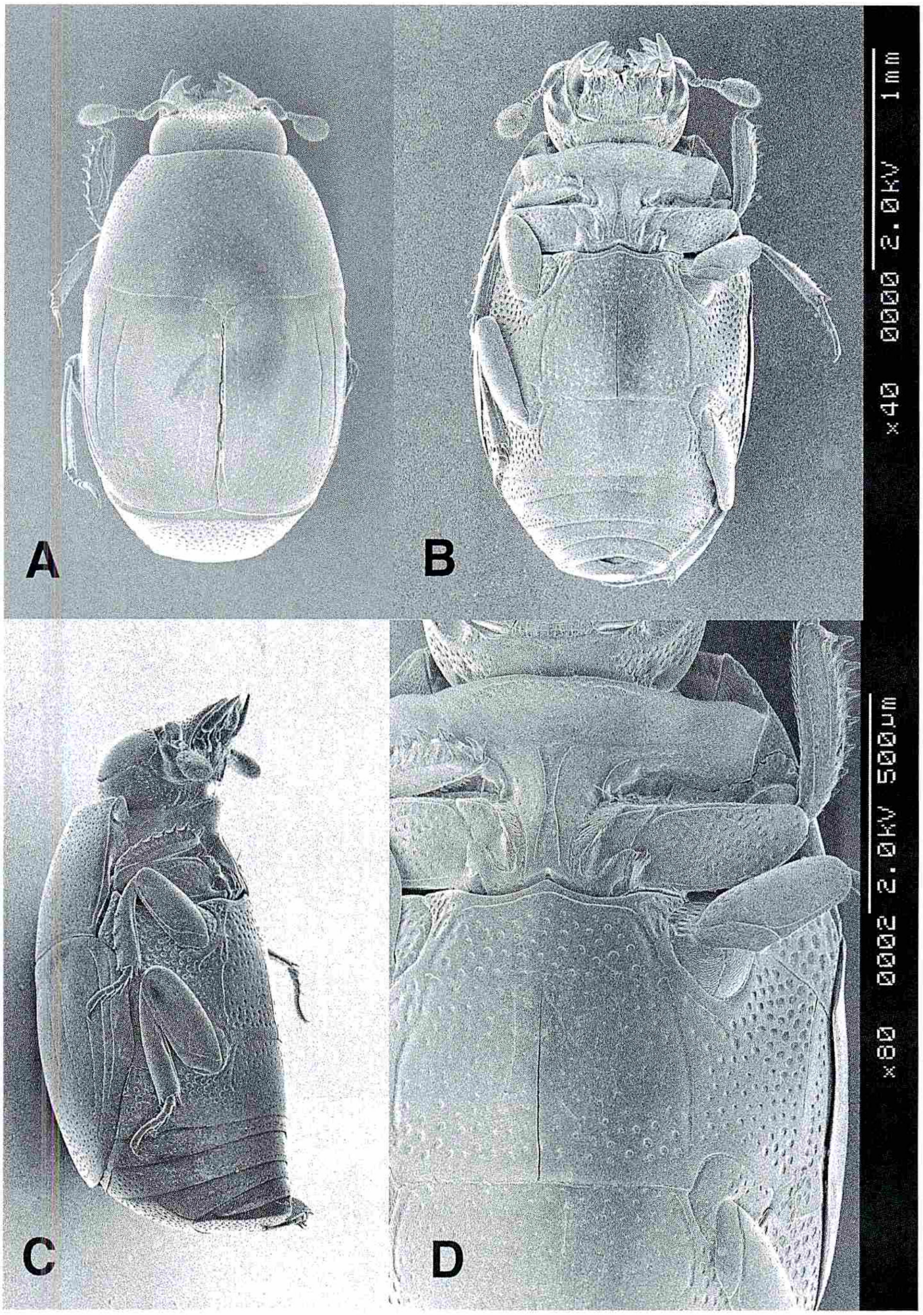

Fig. 1. *Heudister javanicus*. A: Habitus, dorsal view. B: Ditto, ventral view. C: Ditto, lateral view. D: Pro-, meso- and metasterna, ventral view.

tures separated by twice to three times their diameter, and becoming coarser on medio-basal area. Antescutellar area without impression. Basal margin of pronotum bisinuate medially.

Epipleura with complete marginal stria that is impressed distant from margin. Elytral marginal stria complete, its apical end extended inwardly. External subhumeral stria present on apical two-thirds but abbreviated a little before apex. Oblique humeral stria (Fig. 3A) slightly im-

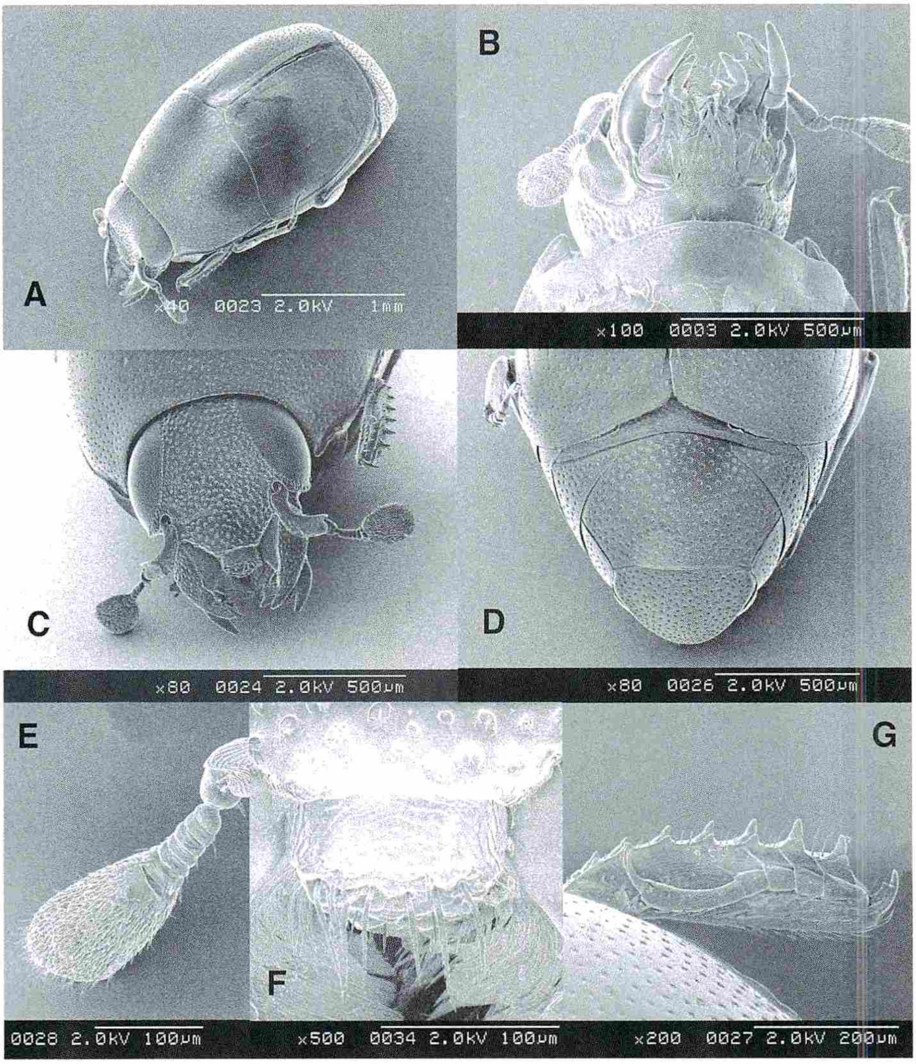

Fig. 2. *Heudister javanicus*. A: Habitus, dorso-oblique view. B: Head, ventral view. C: Ditto, dorsal view. D: Propygidium and pygidium. E: Antenna. F: Labrum. G: Left protibia, dorsal view.

pressed on basal third. First and second dorsal striae impressed on basal two-thirds; third and fourth striae present on basal fifth and sixth, respectively; fifth stria absent; sutural stria present on basal half. All striae finely crenate; basal ends of third and fourth striae curved inwardly, and of sutural outwardly. Surface of elytra evenly covered with coarse and shallow punctures that are separated by twice to four times their diameter and becoming finer basally.

Propygidium (Fig. 2D) long and hexagonal; disk evenly covered with round, coarse and shallow punctures, the punctures separated by twice to three times their diameter. Pygidium (Fig. 2D) densely covered with coarse and round punctures that are separated by their own diameter; the punctures becoming finer along latero-apical margin.

Prosternal lobe (Fig. 1D) short and convex medially, its anterior margin round broadly; marginal stria indistinct, slightly impressed medially; surface sparsely covered with fine punc-

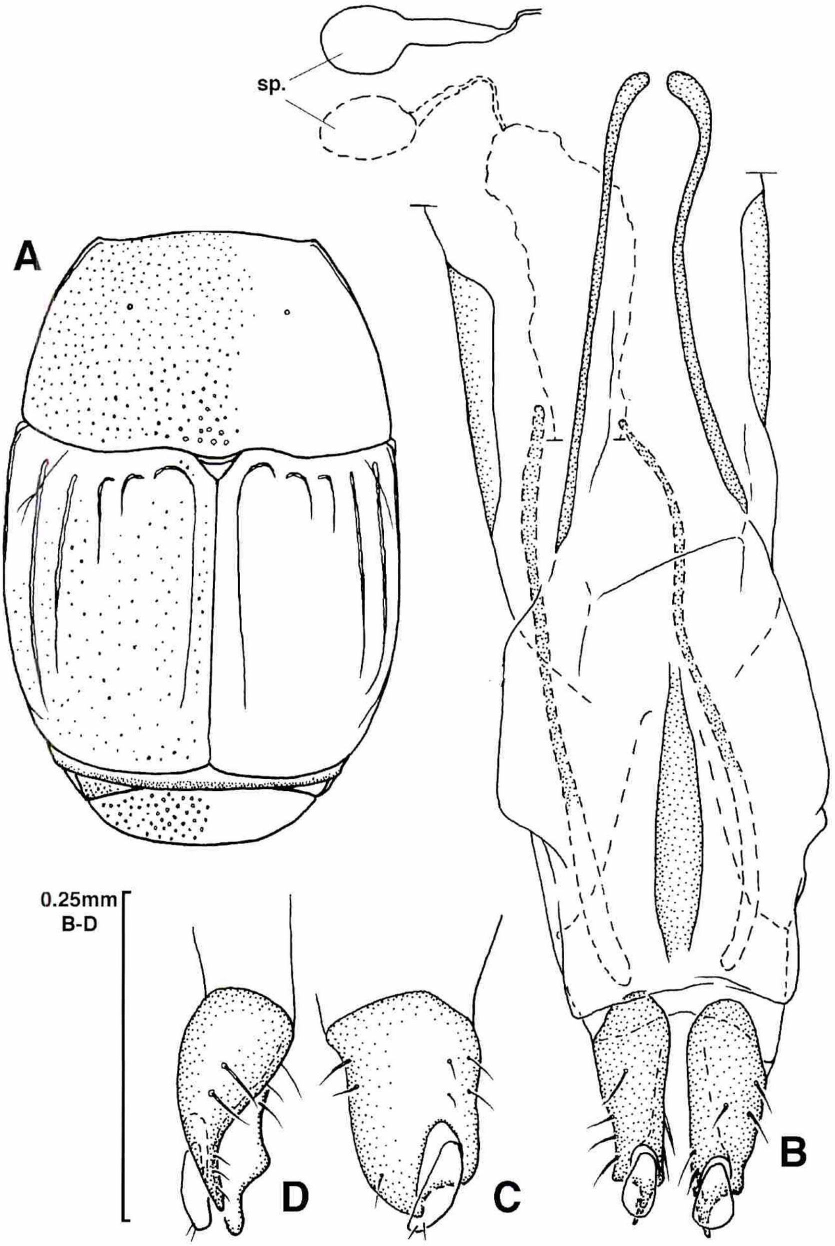

Fig. 3. *Heudister javanicus*. A: Pronotum, elytra and pygidia, dorsal view. B: Female genitalia, ventral view (sp: spermatheca). C: Coxite, inner view. D: Ditto, lateral view.

tures that are separated by about twice their diameter. Prosternal process slightly convex medially, with complete carinal striae, the carinal striae divergent posteriorly and anteriorly and their outer edges cariniform. One lateral prosternal striae present, strongly curved outwardly at apex, nearly parallel to suture dividing the lobe from the rest of prosternum; its posterior edge strongly cariniform. Basal margin of prosternal process with cuspidal emargination at middle.

Mesosternum (Fig. 1D) transverse and flat; surface densely covered with large, deep and round punctures that are separated by about one-third their diameter; anterior margin angulate outwardly at middle; marginal stria of mesosternum deeply impressed and complete, its outer edge strongly carinate; another stria (short impression) present behind antero-lateral angle. Meso-metasternal suture finely impressed and almost straight. Intercoxal disk of metasternum rather sparsely covered with large punctures that are separated by about their own diameter and becoming sparser latero-posterior area. Post-mesocoxal stria extended posteriorly and reaching at center of lateral metasternal disk. Lateral metasternal stria extending posteriorly and its outer edge carinate, the apical end attaining near at inner angle of hind coxa. Lateral metasternal disk densely covered with large punctures that are separated by half their diameter on basal half and becoming sparser posteriorly; the punctures separated by about their own diameter on outer posterior half of the disk and by twice or three times their diameter on inner posterior half.

Intercoxal disk of 1st abdominal sternum (Fig. 1D) sparsely and coarsely punctate, the punctures separated by their own diameter to five times their diameter; lateral stria present basal half on each side. Lateral disk densely covered with large, deep and round punctures that are separated by their own diameter.

Protibia (Fig. 2G) with 7 spiny denticles on outer margin. Mesotibia with 5 dental spines on outer margin, and 4 spines present on apical margin. Metatibia without spines on outer margin, and 3 spines present on apical margin. Ventral surface of profemur densely covered with coarse punctures.

Female genitalia as shown in Fig. 3B–D. Spermatheca weakly sclerotized.

Distribution. Indonesia (Java Island).

Etymology. From the Latinized adjective for "Java", referring to the region in which this species is found.

Key to the species of the genus *Heudister*

1 Body black with bronze luster. Labrum with 2 short yellow setae. Pronotal marginal stria present only anterior angle. First and 2nd elytral dorsal striae short, present on basal two-thirds and half, respectively. Anterior marginal stria of prosternal lobe complete. .... *H. mieni*

— Body light reddish brown. Labrum with 8 yellow setae. Pronotal marginal stria impressed completely on lateral side. First and 2nd elytral dorsal striae rather longer, present on basal fourth-fifths and two-thirds, respectively. Anterior marginal stria of prosternal lobe only impressed medially, not complete. .... *H. javanicus* n. sp.

要　　約

大原 昌宏：インドネシア産 *Heudister* 属の１新種の記載. ——— *Heudister* 属の第２種目である *H. javanicus* をインドネシア・ジャワ島から記載し，２種の検索表を付した．*Heudister* 属は上唇に刺毛をもつことからエグリエンマムシ族 Exosternini に分類するのは問題がある．しかし，雄交尾器が調べられていない現在では暫定的に同族に含める分類処置をした．

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A New *Spiloscapha* and a New *Basanus* from Taiwan (Coleoptera: Tenebrionidae: Scaphidemini)

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Abstract Two new tenebrionid beetles from Taiwan (Fushan Botanical Garden, Ilan county) are described: *Spiloscapha taiwana* sp. nov. and *Basanus lui* sp. nov.

The genus *Spiloscapha* BATES, 1873 contains 19 described species distributed in the Oriental, Papuan and Australian regions, which were listed and keyed by SCHAWALLER (1997). According to SCHAWALLER (1995) the genus *Basanus* LACORDAIRE, 1859 contains about 25 described species, which are distributed in the Palearctic Far East (including Ussuri, Korea, Japan, Taiwan), the Himalaya, continental Southeast Asia, the Philippines, the Sunda Islands and New Guinea. SCHAWALLER (1995) presented a checklist of 17 species with the exclusion of doubtful taxa described by PIC and a key was given for 6 species from the continental Southeast Asia.

Both genera were classified as members of Diaperini by a number of authors, including SCHAWALLER (1995, 1997), and MASUMOTO and KONDO (1984). However, DOYEN (1984) pointed out that *Scaphidema* REDTENBACHER, 1849 and *Spiloscapha* had several primitive characters which separated them from Diaperini. DOYEN *et al.* (1989) listed four adult and three larval synapomorphies and added *Basanus* for the subtribe Scaphidemini, which was considered by them "to be the less derived sister clade to the Nilionini–Leiochrini".

Fushan Experimental Forest with the Fushan Botanical Garden is one of the long-term ecological research sites of Taiwan Ecological Research Network (TERN). In April, 2002 the junior author visited the site, and collected several specimens of a *Spiloscapha* species from a fungus-infested fallen log. Furthermore, he determined most of the Tenebrionidae material deposited in the collection of the Taiwan Forestry Research Institute (TFRI, Taipei), where an unknown *Basanus* was found. The senior author ascertained that these findings represent two new species.

Specimens on which the present paper is based are housed in the following collections:

CKA — Collection of Kiyoshi ANDO (Osaka, Japan)
HNHM — Hungarian Natural History Museum (Budapest, Hungary; curator: Ottó MERKL)
NSMT — National Science Museum (Natural History) (Tokyo, Japan; curator: Shuhei

NOMURA)

SMNS— Staatliches Museum für Naturkunde (Stuttgart, Germany; curator: Wolfgang SCHAWALLER)

TFRI — Taiwan Forestry Research Institute (Taipei, Taiwan, Republic of China; curator: Jung-Tai CHAO).

Acknowledgements — The authors' thanks are due to Prof. Dr. Kiyoshi ANDO, Hebei University, for his invaluable advice. Drawings were made by Mr. János PÁL (Budapest). Many thanks for Dr. Jung-Tai CHAO, research scientist, Division of Forest Protection and his colleagues at the TFRI for all the hospitality and help the junior author received during his study trip to Taiwan in April 2002 when one of the above described two new species was collected. The trip was supported by a grant from the National Science Council, Taiwan, Republic of China.

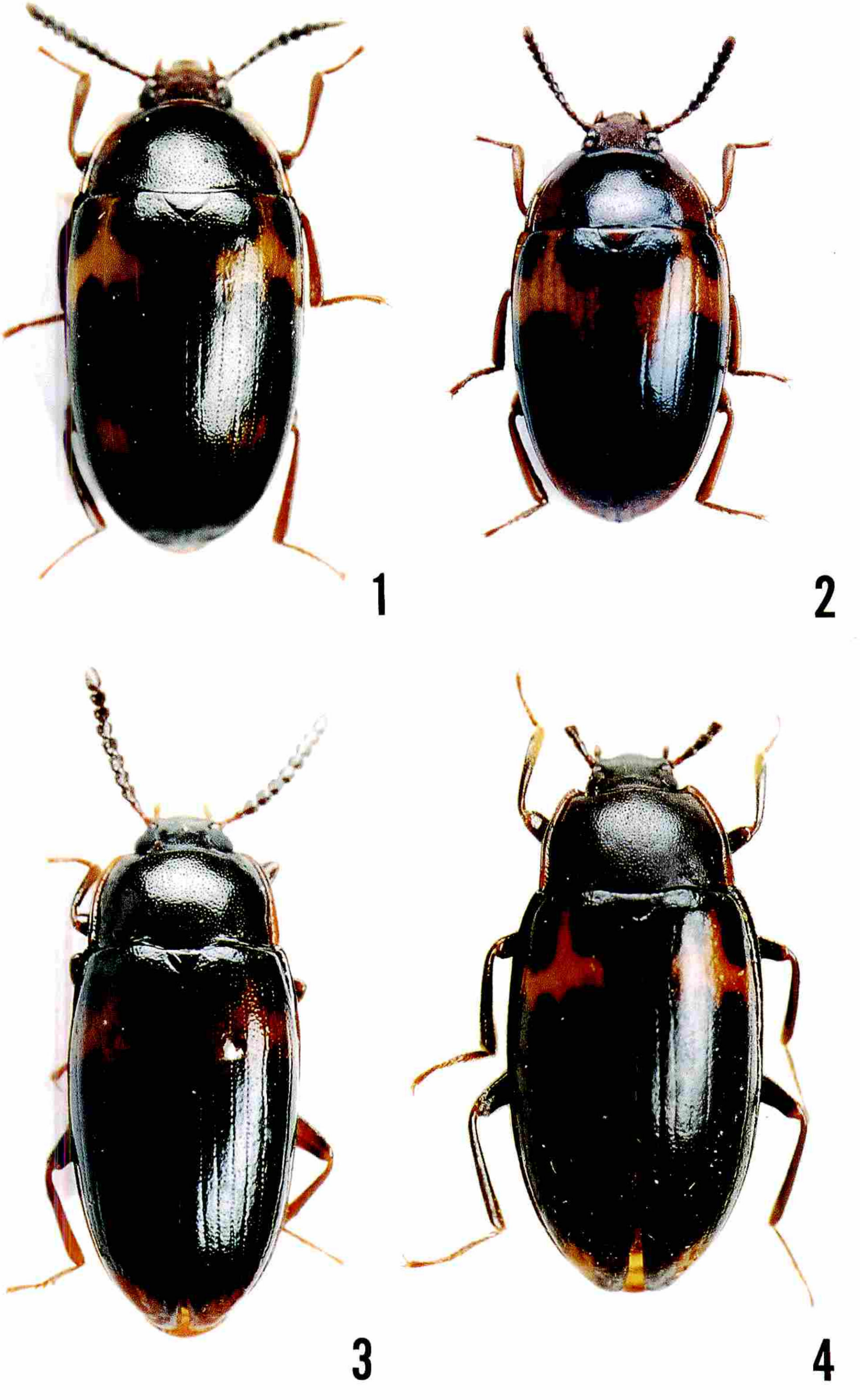
Spiloscapha taiwana sp. nov.

(Figs. 1, 5–6)

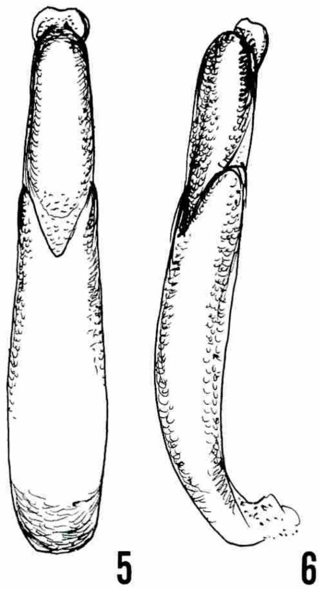
Description. Body oval, moderately convex and virtually glabrous dorsally (Fig. 1). Two basal segments and apical part of 11th segment of antennae, head, narrow and ill-defined lateral margins of pronotum, ventral sides of head and prothorax, and legs dark reddish brown, the remaining parts of antennae, major part of pronotum, scutellum, elytra (except patches), and major part of ventral side brownish black; each elytron with a pair of yellowish patches, anterior patch extending from 2nd interval to 8th, with a prolongation reaching base of elytra in 5th interval, with posterior margin zigzagged; posterior patch smaller than anterior, somewhat triangular, extending from 3rd interval to 6th, with anterior and posterior margins zigzagged; each surface almost glabrous, dorsal surface moderately shining, ventral surface somewhat alutaceous. Body length: 5.3–6.6 mm.

Head transversely subhexagonal, gently inclined apically, shallowly depressed in antero-lateral parts, closely, coarsely and irregularly punctate, the punctures tending to be confluent in antero-lateral parts; clypeus truncate at apex; fronto-clypeal suture obsolete; labroclypeal membrane exposed; genae oblique, slightly raised, with a narrow impunctate area in front of eyes; frons feebly convex; interocular distance about 3 times wider than transverse diameter of an eye in male, 2.5 times in female. Eyes transverse, weakly convex laterally, ocular groove indistinct. Antennae weakly flattened, with segments 5th to 10th wider than long, length ratios of segments from base to apex: 0.27, 0.10 (smallest), 0.19, 0.15, 0.15, 0.16, 0.16, 0.16, 0.15, 0.14, 0.38.

Pronotum about 1.8 times as wide as long, somewhat trapezoidal, widest at base, gradually tapering anteriorly; apex weakly emarginate, feebly produced in middle, impunctate around the produced area; base nearly straight, gently sinuous on each side; sides gently declined to lateral margins, which are markedly grooved; basal margin not bordered (except near posterior angles), anterior margin with bordering interrupted medially; anterior angles subrectangular, posterior angles slightly obtuse; disc moderately convex, with punctures much smaller and sparser than those on head; punctural interspaces smooth, as wide as 2–6 puncture diameters. Scutellum triangular with slightly rounded sides, medio-basal part with punctures sparser and smaller than those on pronotum.



Figs. 1–4. Habitus of *Spiloscapha* and *Basanus* spp. — 1, *Spiloscapha taiwana* sp. nov., holotype; 2, *S. kobayashii* SHIBATA, 1978; 3, *Basanus lui* sp. nov., holotype; 4, *Basanus formosanus* MASUMOTO, 1982.



Figs. 5–6. Aedeagus of *Spiloscapha taiwana* sp. nov., — 5, dorsal view, 6, lateral view.

Elytra subparallel-sided, 1.4 times as long as wide, about 3 times longer and 1.2 wider than pronotum, widest at basal 2/5; dorsum moderately convex, highest at basal 2/5; disc with rows of small closely set punctures; 8th row obsolete; intervals flat, with scattered punctures smaller than punctures of rows, interspaces between punctures as wide as 1–4 puncture diameters; 8th intervals gently convex before apex; sides steeply declined to lateral margin, which are grooved; humeral callus weakly swollen; apex roundly produced.

Legs gently flattened, without modification; pro-, meso- and metatarsomere length ratios: 0.16, 0.12, 0.11, 0.10 (smallest), 0.48; 0.16, 0.13, 0.12, 0.11, 0.51; 0.36, 0.13, 0.14, 0.56.

Aedeagus elongate fusiform, 0.8 mm long, with basal piece gently curved in lateral view (Fig. 6); lateral lobes about 0.3 mm long, oval in dorsal view; bilobed apical part of penis exposed from lateral lobes in dorsal view (Fig. 5).

Holotype: ♂, labelled as follows: "Taiwan, Ilan County, Fushan Botanical Garden, from tree trunks at night, 8–11. IV. 2002, leg. O. Merkl"; "Holotype *Spiloscapha taiwana* MAS. et MER.". It is deposited in the HNHM. Paratypes: 18 specimens, same data as the holotype. Thirteen paratypes are deposited in the HNHM, two in the TFRI, one in the CKA, one in the NSMT and two in the SMNS.

Notes. One species of the genus, *Spiloscapha kobayashii* SHIBATA, 1978 (Fig. 2), has hitherto been known from Taiwan. The new species can be distinguished from *S. kobayashii* by the body smaller and slenderer (ca. 7.5 mm in *kobayashii*), the head dark reddish brown (ferrugineous in *kobayashii*), the anterior angles of pronotum subrectangular (acutely produced in *kobayashii*), the pronotum largely black with vaguely defined paler parts along lateral margins (distinctly patterned in *kobayashii*); the elytra with four yellowish patches (two patches and ferrugineous colouration along subapical part of lateral margin in *kobayashii*). The new species runs to the *assamica—ichihashii—kobayashii* triplet in the SCHAWALLER's (1997) key, but it differs from all three species in having a largely black (instead of patterned or entirely ferrugineous) pronotum and two pairs of yellowish patches on the elytra.

Etymology. This new species is named after the country name of "Taiwan".

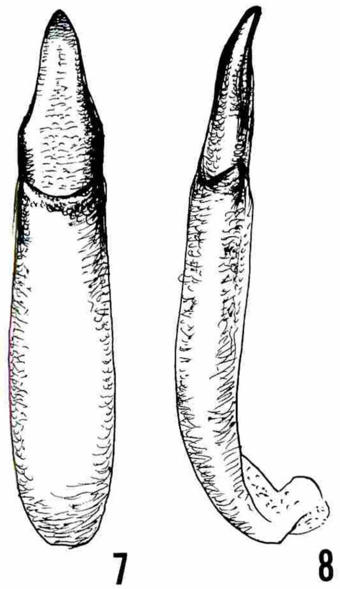
Basanus lui sp. nov.

(Figs. 3, 7–8)

Description (holotype, male). Body oblong oval, gently convex and virtually glabrous dorsally (Fig. 3). Dorsal surface of head, eyes, 4th to 11th antennal segments, pronotal disc, scutellum and elytra (except two pairs of patches) piceous; elytral patches reddish brown; anterior patch with a short and broad prolongation not reaching base of elytron, and with slightly zigzagged posterior margin; posterior patch situating before the apex near lateral edge; basal 3 segments of antennae, mouth parts, bases of femora, apices of tibiae and tarsi lighter brown; dorsal surface moderately shining, ventral surface somewhat alutaceous. Body length: 5.6 mm.

Head transversely subhexagonal, gently inclined apically, rather closely, unevenly punctate; clypeus truncate at apex, finely bordered from genae, fronto-clypeal suture obsolete; labroclypeal membrane exposed; genae oblique, weakly raised; frons simple and broad, with shallow central impression, interocular distance about twice as wide as transverse diameter of an eye. Eyes rather large, strongly convex laterally, ocular groove shallow, extending from behind to middle. Antennae with segments 4th to 10th wider than long, length ratios of segments from base to apex: 0.24, 0.10 (smallest), 0.21, 0.23, 0.22, 0.24, 0.25, 0.24, 0.23, 0.22, 0.36.

Pronotum about 1.7 times as wide as long, parallel-sided in basal half, then slightly tapering anteriorly; apex weakly, widely emarginate, very slightly sinuous on each side, finely bordered; base bisinuous; sides gently declined to lateral margins, which are markedly grooved; basal margin not bordered (except near posterior angles), anterior margin with medial interruption of bordering; anterior angles rounded, gently produced; posterior angles subrectangular; disc moderately convex, rather closely covered with small punctures, with a pair of obliquely



Figs. 7–8. Aedeagus of *Basanus lui* sp. nov. — 7, dorsal view, 8, lateral view.

transverse impressions near posterior angles; punctural interspaces smooth, as wide as 2–4 puncture diameters. Scutellum triangular with rounded sides, rather smooth, scattered with punctures sparser and smaller than those on pronotum.

Elytra subfusiform, about 1.6 times as long as wide, 3.5 times longer and 1.3 times wider than pronotum, widest at basal 1/3; dorsum moderately convex, highest at basal 1/3; disc with rows of subcontiguous punctures about four times the size of the smallest punctures of intervals; 8th row obsolete; intervals with scattered punctures of various size, interspaces between punctures as wide as about 1–4 puncture diameters; sides steeply declined to lateral margins, which are markedly grooved and feebly sinuous before apex; humeri weakly swollen; apices feebly, roundly produced.

Legs without modification; length ratios of pro-, meso- and metatarsal segments: 0.21, 0.12, 0.11, 0.10 (smallest), 0.62; 0.16, 0.13, 0.14, 0.13, 0.38; 0.69, 0.24, 0.22, 0.64.

Aedeagus elongated fusiform, 0.8 mm long, gently curved in lateral view (Fig. 8); lateral lobes about 0.3 mm long, subparallel-sided in basal parts, then tapering toward apex; apex entirely fused and acutely pointed (Fig. 7).

Holotype: ♂, labelled as follows: "Fushan, Ilan Co., TAIWAN, IV–28–1995, S. S. LU"; "Light Trap Site: B,0000"; "Holotype *Basanus lui* MAS. et MER."; "[bar code and] 00083434". It is deposited in the TFRI.

Notes. The only species of the genus hitherto known from Taiwan is *Basanus formosanus* MASUMOTO, 1982 (Fig. 4). The new species can be distinguished from the latter by the following features: body slenderer and smaller (7.3–8.5 mm in *formosanus*), eyes strongly protruding from head (less convex in *formosanus*), pronotum with front angles obtuse (much more produced in *formosanus*), pronotal interspaces smooth (with isodiametrical reticulation in *formosanus*), punctures of rows on elytra distinctly larger than most of punctures of intervals (punctures of rows nearly equal to those of intervals in *formosanus*). Anterior reddish patch of elytra is more extensive in *formosanus*, although this feature is subject to variability.

Basanus formosanus also occurs in the Fushan Botanical Garden. It was collected by the junior author along with *Spiloscapha taiwana* sp. nov. Data are as follows: Fushan, 700 m, 24°45' N, 121°34' E, from fallen logs at night, 10. IX. 1999, G. CSORBA and B. HERCZIG (9 specimens, HNHM); Fushan Botanical Garden, from tree trunks at night, 8–11. IV. 2002, O. MERKL (11 specimens, HNHM, 2, TFRI).

Etymology. Name of the new species is dedicated to Mr. Sheng-Shan Lu, expert of social wasps (Vespidae) in the TFRI (Taipei), who collected the holotype.

要　　約

益本 仁雄・Ottó MERKL：台湾産コモンキノコゴミムシダマシ属 *Spiloscapha* およびヨツボシゴミムシダマシ属 *Basanus* の新種．——— 台湾産コモンキノコゴミムシダマシ属 *Spiloscapha* およびヨツボシゴミムシダマシ属 *Basanus* の新種を各１種，すなわち *Spiloscapha taiwana* sp. nov. および *Basanus lui* sp. nov. を記載した．これまでに台湾から，*Spiloscapha kobayashii* SHIBATA および *Basanus formosanus* MASUMOTO が知られているが，それらとは容易に区別がつく．既知種を含めた４種の背面写真，ならびに新種の雄交尾器の背面および側面の図を提示した．

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Ent. Rev. Japan, **58** (2): 172, Oct. 30, 2003

A New Synonym of *Onthophagus sauteri* GILLET (Coleoptera: Scarabaeidae)

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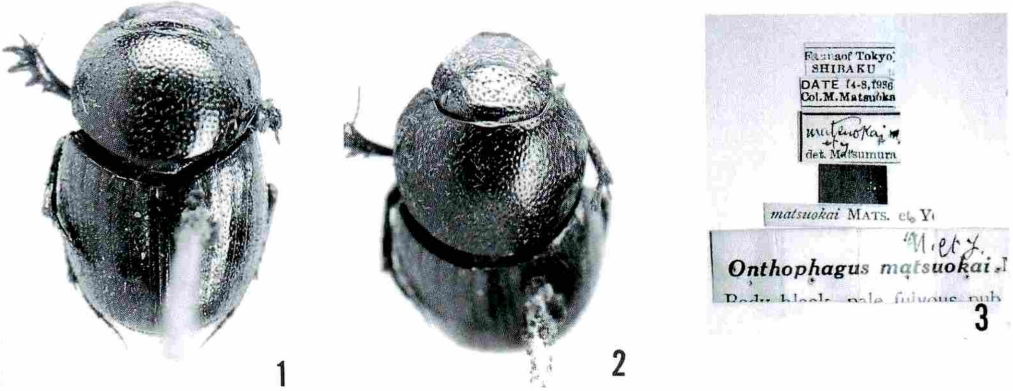
On the occasion of my entomological research in Hokkaido made in July, 2003, I had the opportunity of examining the MATSUMURA collection preserved in the Hokkaido University Museum, Hokkaido University. I examined several problematical coprophagous beetles from Taiwan and Japan and confirmed the following new synonymy.

Onthophagus (s. str.) *sauteri* GILLET, 1924

(Figs. 1-3)

Onthophagus sauteri GILLET, 1924, Annls. Soc. sci. Brux., 44: 68.
Onthophagus matsuokai MATSUMURA et YOHENA, 1937, Ins. matsum., Sapporo, 11: 160. **Syn. nov.**

Notes. MATSUMURA and YOHENA (1937) described "*Onthophagus* (s. str.) *matsuokai*" based on a female material from "Shibaku, Tokyo". It is a junior synonym of *Onthophagus sauteri* GILLET, 1924, originally described from "Koshun, Formose". The locality of the former must be unreliable judging from the subsequent data*, and therefore this species should be excluded from the fauna of Japan.



Figs. 1–3. *Onthophagus matsuokai* MATSUMURA et YOHENA, holotype, male. — 1, dorsal aspect; 2, head and pronotum; 3, data and determination labels.

I thank Dr. Masahiro ÔHARA, the Hokkaido University Museum, Hokkaido University, for his kind permission to examine the MATSUMURA collection, and also thank Dr. Makoto KIUCHI, Tsukuba City, for taking very clear photographs inserted in this small paper.

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*) MATSUMURA (1973) described *Onthophagus yubarinus* from "Hokkaido" and *O. yubarinus* f. *taiheizana* [sic] from "Mt. Taihei in Formosa". He (1938) also described *Matashia mushana* from Musha, Formosa. These three are actually of the same species and it is endemic in Taiwan. As this example, the type locality of *O. sauteri* was presumably mistaken.

Ent. Rev. Japan, **58** (2): 173–182, Oct. 30, 2003

New or Little-Known Tenebrionid Species from Japan (Part 4) (Coleoptera)

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Abstract This is the fourth part of the series of studies on the Japanese Tenebrionidae. Four new species are newly described, *Gonocephalum hiranoi* sp. nov. (Opatrini), *Boletoxenus kawadai* sp. nov. (Bolitophagini), *Diaclina nakatai* sp. nov. (Ulomini) and *Uloma tadafumii* sp. nov. (Ulomini), and *Eutochia atra* PIC is recorded from the southern part of Japan.

As the fourth part of the series of studies on the Japanese Tenebrionidae, we are going to describe four new species belonging to the tribes Opatrini, Bolitophagini and Ulomini. We are also going to record *Eutochia atra* PIC, 1926 as a member of the Japanese fauna for the first time.

We thank Mr. Yukihiko HIRANO (Odawara City), Mr. Kazuyuki KAWADA (Kawasaki City), Mr. Tadafumi NAKATA (Ishigaki City), Mr. Tatsuro HANATANI (Ishigaki City), Dr. Yoshihiro HIRAI, the National Institute of Agrobiological Sciences, (Tsukuba City), Mr. Yoshikazu KUROSA (Tokyo), Mr. Koji TOYODA (Saitama Prefecture), and Mr. Hideyuki WATANABE (Niiza City), for offering invaluable materials. We appreciate Dr. Makoto KIUCHI (Tsukuba City), for taking very clear photographs inserted in this paper.

All the holotypes designated and the specimens recorded in the Japanese fauna are deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo, Japan.

Gonocephalum hiranoi sp. nov.

[Japanese name: Shônan-suna-gomimushidamashi]
(Figs. 1, 7–9)

Brownish black, with medial part of abdomen slightly lighter in colour; each surface mat, covered with pale brownish adpressed hairs, and often partly covered with secretory substance. Body oblong ovate, moderately convex dorsad.

Male. Head transversely subhexagonal, coarsely rugoso-punctate; clypeus noticeably emarginate at apex, both sides of emargination roundly produced apicad, area of the fronto-clypeal border gently grooved, outer margins gently incised at the clypeo-genal borders; genae somewhat elliptical, weakly produced laterad, areas before eyes inclined; frons somewhat rectangular, weakly raised in medial part, feebly depressed in anterior and lateral parts, areas around eyes gently ridged, diatone about 3.5 times the width of transverse diameter of an eye. Eyes ovate, slightly oblique, gently convex above. Antennae rather club-shaped, reaching basal 1/4 of pronotum, four apical segments wider than long, ratio of the length of each segment from base to apex: 0.23, 0.12, 0.68, 0.28, 0.23, 0.24, 0.22, 0.19, 0.18, 0.16, 0.26.

Pronotum 1.79 times as wide as long, widest at the base; apex widely emarginate, finely bordered in lateral parts; base noticeably sinuous in lateral parts, finely bordered, the border interrupted at the middle and disappeared in lateral parts; sides gently declined to rather widely explanated lateral margins, which are gently curved and bearing small scale-like hairs along the edges; front angles rather acute and projected antero-interiad, hind angles acute, weakly projected postero-laterad; disc weakly convex, covered with microsculpture, bearing granules, each with an adpressed scale-like hair and often surrounded by interrupted low ridges. Scutellum semicircular, weakly raised posteriad, almost smooth, sparsely scattered with minute punctures, each with a microscopic adpressed scale-like hair.

Elytra subovate, 1.33 times as long as wide, 2.39 times the length and slightly wider than pronotum at the base, widest at the middle, gently narrowed basad and roundly so apicad; dorsum moderately convex, highest at basal 3/8, with areas behind scutellum raised, and weakly depressed behind this areas; disc weakly punctato-striate; intervals very slightly raised, covered with microsculpture and minute granules, sparsely provided with larger granules, each with an adpressed scale-like hair at the posterior side; sides rather steeply declined to lateral margins, which are grooved and edged; humeri feebly swollen; apices slightly, roundly produced.

Prosternum coarsely asperate, granulate, finely bordered at apex, raised and haired in postero-medial part, with obtuse prosternal process; mesosternum rather small and V-shaped, coarsely asperate; metasternum rather short, weakly depressed in medial part, asperate and covered with adpressed hairs.

Legs normal-sized as a member of this genus; protibia gently curved, moderately widened to apex, serrate and spinulous along outer margin, dorsal surface covered with microsculpture and rugosities, ventral surface longitudinally, feebly concave in medial part, sparsely with granules and adpressed setae; meso- and metatibae rather simple in shape; ratios of the lengths of pro-, meso- and metatarsal segments: 0.20, 0.12, 0.12, 0.14, 0.51; 0.22, 0.14, 0.12, 0.12, 0.52; 0.39, 0.27, 0.24, 0.58.

Male genitalia 2.3 mm in length, 0.4 mm in width; basal piece strongly curved in the middle in lateral view; lateral lobes 0.68 mm in length, fused in basal part, separately protruded in apical part, with apices close to each other and roundly produced.

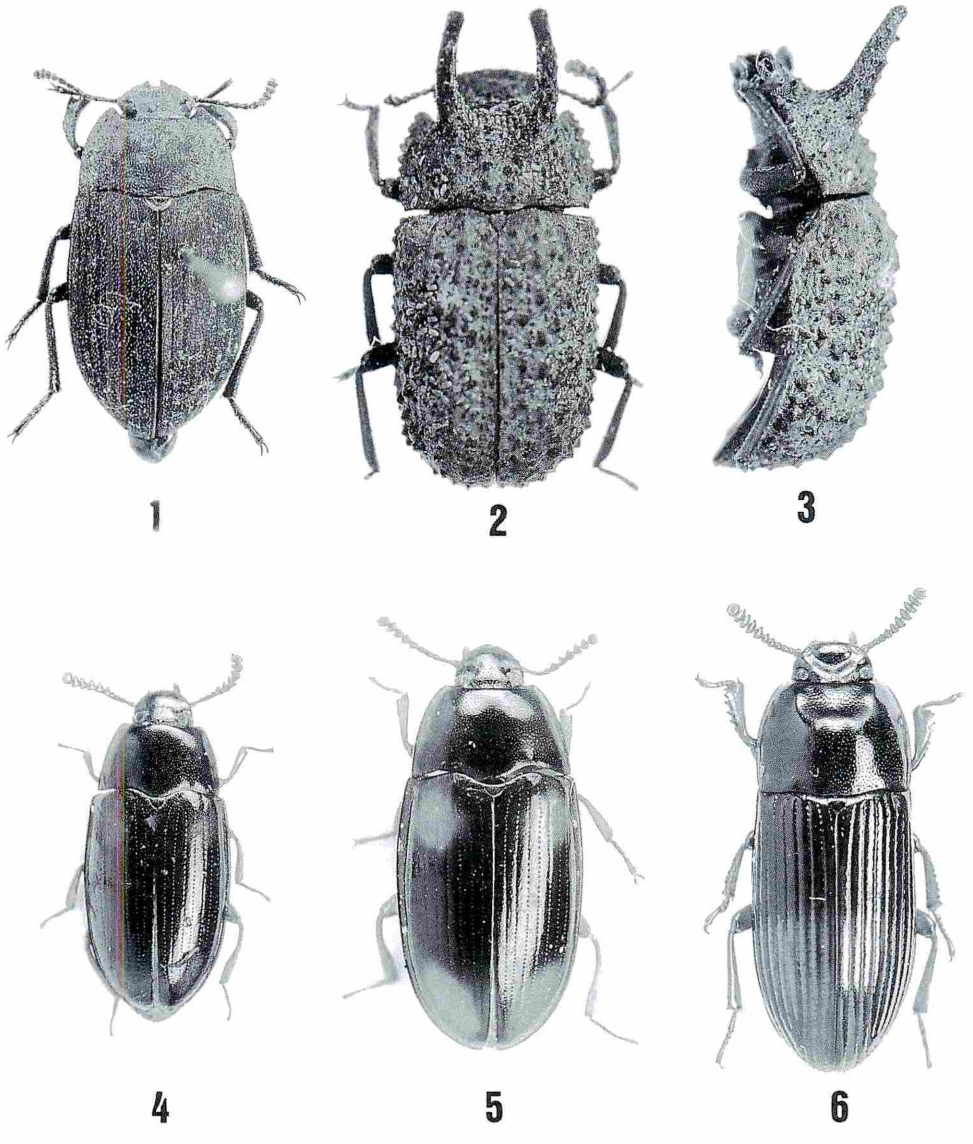
Body length: 10.3–10.6 mm.

Female. Unknown.

Type series. Holotype: ♂, Nishihama~Yanagishima-kaigan, Chigasaki City, Kanagawa Pref., Honshu, Japan, 23. III. 1998, Y. HIRANO leg. Paratypes: 2♂♂, same data as the holotype; 5♂♂, Banyu, Hiratsuka City, Kanagawa Pref., 15. III. 1992, Y. HIRANO leg.

Notes. This new species resembles to *Gonocephalum pubens* (MARSEUL, 1876), distributed in Japan (Honshu, Awashima, Sado, Shikoku, Kyushu) Korea, China, Taiwan and India. But can be distinguished from the latter by the body smaller and shorter (10.7–13.6 mm in *G. pubens*), pronotum wider (1.61–1.76 times as wide as long in male of *G. pubens*), elytra widest at middle (widest at basal 1/3 in male of *G. pubens*), and male genitalia rather slender.

Etymology. This specific name is given after Mr. Yukihiko HIRANO, who collected the type series.



Figs. 1–6. Habitus. — 1, *Gonocephalum hiranoi* sp. nov., holotype, male; 2–3, *Bolitoxenus kawadai* sp. nov., holotype, male, 2: dorsal view, 3, lateral view; 4, *Diaclina nakatai* sp. nov., holotype, male; 5, *D. quadrimaculata* (Gebien, 1913), male; 6, *Uloma tadafumii* sp. nov., holotype, male.

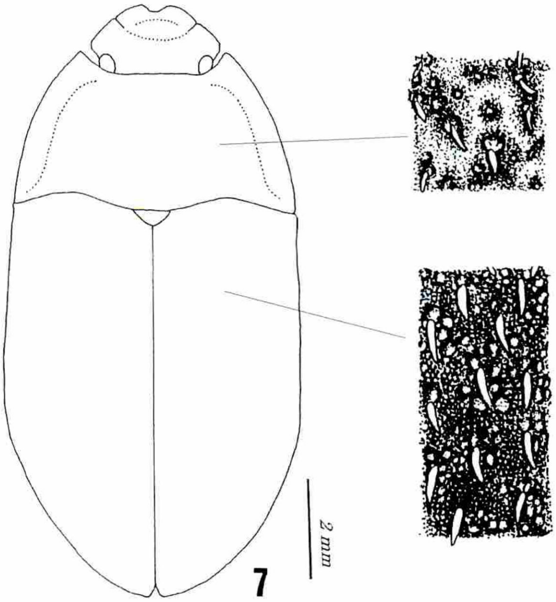


Fig. 7. *Gonocephalum hiranoi* sp. nov., male, small areas of pronotum and elytron are drawn in a magnified scale to show puncturation and microsculupture.

Boletoxenus kawadai sp. nov.

[Japanese name: Iriomote-kobusujitsuno-gomimushidamashi]
(Figs. 2–3,10–11)

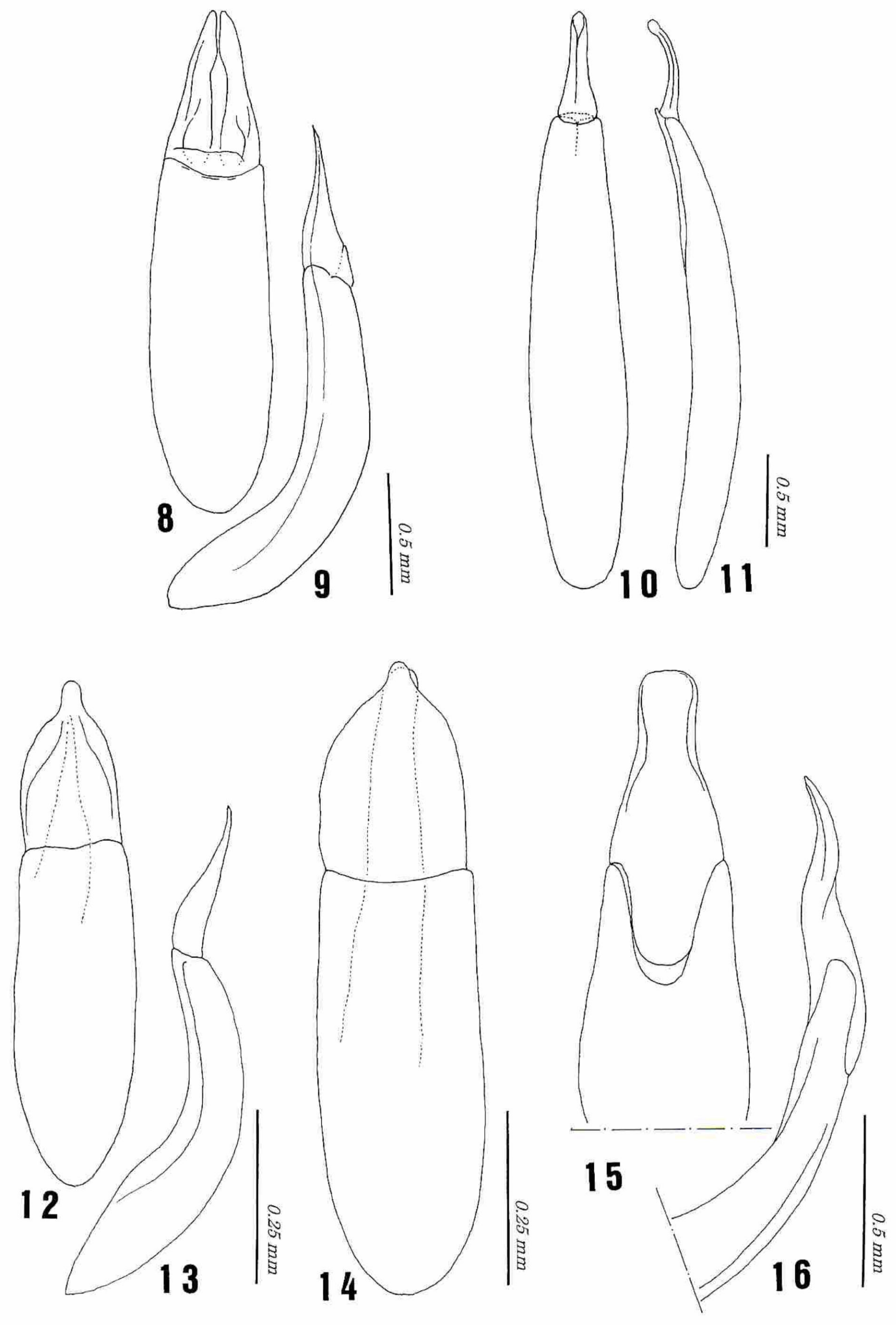
This new species resembles *Boletoxenus bellicosus* (LEWIS, 1894), distributed in Japan, but can be distinguished from the latter by the following characteristics:

Male. Body smaller (6.5–7.3 mm; 7.0–9.0 mm in *B. bellicosus* = *Bb*) and slightly narrower (1.9 times as long as wide; 1.8 times as long as wide in *Bb*); genae a little more acutely produced laterad; front angles more noticeably projected anteriad; antennae subclavate, similar to those of *Bb*, but 5th to 10th segments being more acutely produced interiad, ratio of the length of each segment from base to apex: 0.51, 0.14, 0.27, 0.19, 0.20, 0.21, 0.20, 0.19, 0.18, 0.26, 0.16.

Pronotum with lateral margins more frequently crenulate; hairs on summits of pronotal horns finer; tubercles on elytra smaller, mostly not forming longitudinal ridges; prosternum raised longitudinally along the medial line, though the ridge obviously inclined anteriad (not inclined in *Bb*).

Legs slenderer; protibia with outer margin more noticeably gouged in apical 2/5; ratios of the lengths of pro-, meso- and metatarsal segments: 0.10, 0.09, 0.11, 0.10, 0.48; 0.11, 0.09, 0,08, 0.11, 0.56; 0.16, 0.07, 0.14, 0.55.

Male genitalia smaller, about 2.3 mm in length, 0.3 mm in width, (3.0 mm in length and



Figs. 8–16. Male genitalia. — 8, 10, 12, 14 and 15 in dorsal view; 9, 11, 13 and 16 in lateral view. — 8–9, *Gonocephalum hiranoi* sp. nov.; 10–11, *Bolitoxenus kawadai* sp. nov.; 12–13, *Diaclina nakatai* sp. nov.; 14, *D. quadrimaculata* (GEBIEN, 1913); 15–16, *Uloma tadafumii* sp. nov.

0.4 mm in width in *Bb*), feebly curved in lateral view; basal piece simple and elongated fusiform, 2.0 mm in length (2.6 mm in length in *Bb*); fused lateral lobes about 0.3 mm in length (0.4 mm in length in *Bb*), prolonged in apical part (slightly bolder than in *Bb*), noticeably curved in lateral view, with apex rounded.

Female. Pronotum with a pair of large humps near apical margin.

Type series. Holotype: ♂, Kanpira~Gunkan-iwa, Iriomote-jima Is., Ryukyu Isls., Japan, 26. VIII. 2002, K. KAWADA leg. Paratypes: 1♀, same data as the holotype; 8♂♂, 7♀♀, same locality as the holotype, VIII. 2002, (emerged in III. 2003), K. KAWADA leg.

Notes. This new species also resembles *B. sasajii* MASUMOTO and AKITA, 2001, distributed in Amami-oshima Island, but can be distinguished from the latter by the larger body, eyes a little smaller in dorsal view, pronotum with bolder horns and front angles less acutely projected, and elytral tubercles mostly subconical (neither fused nor forming ridges).

Etymology. This specific name is given after Mr. Kazuyuki KAWADA, who provided us with a series of the type materials.

Diaclina nakatai sp. nov.

[Japanese name: Hirayotsumon-gomimushidamashi]

(Figs. 4, 12–13)

Reddish brown, with head, pronotum, scutellum, elytra blackish brown; elytra with two pairs of nebulous reddish orange patches: the basal ones subovate; the apical ones fusiform, occasionally fade away; all the patches not connected with elytral margins. Dorsal surface strongly shining, ventral surface gently alutaceous. Body elongate-ovate, gently convex dorsad.

Male. Head subhexagonal, gently convex posteriorly, rather closely and finely punctate, the punctures larger on vertex, becoming smaller towards anterior portions; clypeus transversely subhexagonal, feebly convex widely in middle, fronto-clypeal border very faintly grooved; genae oblique, weakly convex above in anterior part of eyes, with outer margins feebly produced; frons rather short, diatone about 1.75 times the width of transverse diameter of an eye. Eyes transversely oblique, very weakly produced laterad. Antennae subclavate, weakly flattened, barely reaching hind angles of pronotum, 6th to 10th segments dilated apicad, 11th semicircular, ratio of the length of each segment from base to apex: 0.15, 0.08, 0.10, 0.10, 0.10, 0.12, 0.13, 0.13, 0.13, 0.13, 0.16.

Pronotum somewhat trapezoidal, 1.75 times as wide as long, widest at base; apex rather widely emarginate, feebly produced in middle, finely bordered; base rather strongly produced caudad in an arc in medial 2/5, sinuate on each side, finely bordered, with a pair of shallow depressions close to base; sides gently declined to lateral margins, which are rather shallowly but boldly bordered; front angles obtuse with rounded corners, hind angles rather acute with rounded corners; disc gently convex, rather closely punctate, the punctures smaller than those on vertex. Scutellum linguiform, very weakly convex, rather closely scattered with microscopic punctures.

Elytra elongated ovate, 1.35 times as long as wide, 3.08 times the length and 1.32 times the width of pronotum, widest at basal 2/5; dorsum rather weakly convex, highest at the middle; disc with rows of punctures, distance among them being 1.2 to 2.5 times the width of each diameter; intervals slightly convex, scattered with punctures, which are smaller and sparser than those on pronotum; sides steeply declined to lateral margins which are grooved and rimmed; base emarginate in medial 2/5; humeral parts very weakly swollen; apices conjointly rounded.

Legs gently flattened; metatibia with interior face gouged in basal 2/3, bearing a row of 12 to 16 very small teeth along edge; ratios of the lengths of pro-, meso- and metatarsal segments: 0.05, 0.05, 0.05, 0.05, 0.30; 0.08, 0.06, 0.06, 0.06, 0.23; 0.18, 0.16, 0.06, 0.26.

Male genitalia 0.75 mm in length, 0.20 mm in width; basal piece rather strongly curved in middle in lateral view; fused lateral lobes 0.24 mm in length, with protruded apices.

Length: 4.5–5.2 mm.

Female. Metatibiae without special modification.

Type series. Holotype: ♂, Mt. Yarabu-dake, Ishigaki-jima Is., Ryukyu Isls., Japan, 27. I. 2003, T. NAKATA leg. Paratypes: 21 ♂♂, 24 ♀♀, same date as the holotype; 3 ♂♂, 3 ♀♀, same locality and collector as the preceding, 24. I. 2003; 1 ♂, same locality and collector as the preceding, 19. IV. 2001; 1 ♀, Takeda, Ishigaki-jima Is., 27. IV. 1991, T. HANATANI leg.

Notes. This new species resembles *Diaclina quadrimaculata* (GEBIEN, 1913) (Figs. 5 and 14), widely distributed from India to the Philippines, but can be easily distinguished from the latter by the body smaller and shorter (5.5 to 5.8 mm in *D. quadrimaculata*), with the antennae a little slenderer, and the eyes smaller (diatone about 1.57 times the width of transverse diameter of an eye in *D. quadrimaculata*), dorsal punctures larger and coarser, and elytral patches smaller. Distribution records of *Diaclina quadrimaculata* from the Ryukyu Islands in the past (e. g. M. T. CHÛJÔ and ANDO, 1985) should be clarified whether these are on this new species.

Etymology. This specific name is given after Mr. Tadafumi NAKATA, who collected a number of the type series.

Uloma tadafumii sp. nov.

[Japanese name: Nakata-eguri-gomimushidamashi]

(Figs. 6, 15–16)

Dark reddish brown, with antennae, ventral side of head, prothorax and legs lighter in colour, mouth parts yellowish brown; dorsal surface strongly shining, ventral surface weakly and rather alutaceous lustre. Body elongated ovate, subparallel-sided, moderately and longitudinally convex.

Male. Head transversely elliptical, gently convex in posterior part, almost wholly covered with isodiametric microsculpture, noticeably depressed in Y-shape at the middle, of which basal part is depressed again in somewhat inverted V-shape; punctures rather close, comparatively large in depressed areas; clypeus gently convex, almost straight at apex, sparsely scattered with minute punctures; genae somewhat triangular in dorsal view, with outer margins oblique and slightly produced in posterior 1/3, and then slightly narrowed towards eyes, clypeo-genal borders indistinct; frons with a pair of depressions and a longitudinal groove, diatone 2.5 times the width of transverse diameter of an eye. Eyes transverse, gently convex laterad and dorsad. Antennae rather short and somewhat clavate, reaching apical 1/3 of pronotum, seven apical segments widened, the terminal one semicircular, ratio of the length of each segment from base to apex: 0.19, 0.06, 0.08, 0.10, 0.11, 0.13, 0.13, 0.16, 0.13, 0.12, 0.24.

Mentum subcordate, slightly concave, glabrous, alutaceous; gula subparabolic, smooth; terminal segment of each maxillary palpus medium-sized, with apex obliquely truncate, which is slightly longer than the almost straight interior side and 0.6 times as long as the arcuate exterior side.

Pronotum 1.2 times as wide as long, widest at the middle; apex gently emarginate, finely bordered in lateral 3/8; base gently produced in medial 2/5, almost straight in lateral parts; lateral margin feebly produced, markedly bordered; front angles obtuse with rounded corners, hind angles obtusely angulate; disc moderately convex, semicircularly depressed in antero-medial part, the depression is about 1/2 times the width and 2/5 times the length of pronotum, weakly swollen in the middle, with a pair of somewhat longitudinal humps near apex, and also with a pair of inconspicuous humps in postero-medial part along edge of depression; surface rather closely punctate, the punctures larger and coarser in the depression, smaller in middle, and slightly larger in lateral parts. Scutellum widely pentagonal, slightly convex, almost smooth, sparsely scattered with minute punctures.

Elytra about 1.7 times as long as wide, 2.6 times the length and slightly wider than pronotum, widest slightly before the middle, very feebly narrowed basad and gently so apicad; disc grooved and punctate, the punctures in the grooves rather strong and notching intervals, distance among them about 1 to 2.2 times their own diameter; intervals gently convex, finely, somewhat transversely micro-aciculate in places, sparsely scattered with microscopic punctures; sides steeply declined to deeply bordered lateral margins, which are visible from above; humeri feebly swollen; apices roundly produced.

Prosternum except for medial part asperate and alutaceous, smooth in medial part, which is longitudinally raised posteriad, bordered at apex in medial 3/5, with obtuse prosternal process.

Legs medium-sized in members of this genus; protibia rather strongly widened apicad, with dorsal surface almost smooth, ventral surface with a row of about 5 teeth in medial part, inner margin emarginate in basal portion, outer margin rather strongly serrate and with 8–9 teeth; mesotibia with outer margin rather noticeably serrate and spinulous; metatibia with outer margin almost straight but very slightly gouged in apical 1/5, and also with a small spine at apical 1/5; ratios of the lengths of pro-, meso- and metatarsal segments: 0.12, 0.07, 0.07, 0.08, 0.28; 0.19, 0.09, 0.07, 0.07, 0.31; 0.39, 0.10, 0.09, 0.33.

Male genitalia 1.34 mm in length, 0.36 mm in width, rather strongly curved in lateral view; lateral lobes 0.38 mm in length, subfusiform in dorsal view, with apical part weakly bent and truncate.

Female. Unknown.

Body length: 8.3 mm.

Holotype: ♂, Mt. Yarabu-dake, Ishigaki-jima Is., Ryukyu Isls., Japan, 19. IV. 2001, T. NAKATA leg.

Notes. This new species is related to *Uloma ichoi* NAKANE, 1956, described from 'Amami-Oshima', but can be easily distinguished from the latter by the head depressed in Y-shape (V-shape in *U. ichoi*), the pronotum less deeply emarginate, more broadly depressed, with upper edge of the depression bearing two pairs of humps, the elytra with intervals more strongly convex, and the protibia with stronger outer teeth arranged near base to apex.

Etymology. This specific name is given after Mr. Tadafumi NAKATA, who collected the holotype.

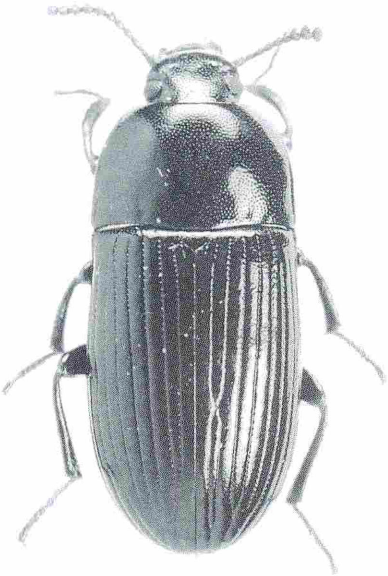


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Fig. 17. *Eutochia atra* Pɪc, 1926, male, Habitus.

Eutochia atra Pɪc, 1926

[Japanese name: Nise-akaheri-gomimushidamashi]

(Fig. 17)

Eutochia atra Pɪc, 1926, Mél. Exot.-ent., Moulin, 46: 29.

Recently, one of the authors (K. M.) had chances of examining a small series of *Eutochia* from the Southwest Islands of Japan. Among them, he found an unknown species. It resembles *Eutochia lateraris* (Bᴏʜᴇᴍᴀɴɴ, 1858), distributed in southern Japan (Tanega-shima Is., Yaku-shima Is. and Ryukyu Islands), Taiwan, Hong Kong, and some other parts of Southeast Asia. Lateral parts of the elytra of this species are not reddish as in *E. lateraris*, but the elytra are wholly black. He sent the material to Dr. Ottó Mᴇʀᴋʟ, the Hungarian Natural History Museum for determination. Dr. Mᴇʀᴋʟ kindly informed the authors that it is *Eutochia atra* Pɪc, 1926. This species was originally described from Sri Lanka, and is widely distributed from Southeast Asia. The following records are the first from Japan.

Specimens examined. 1 ex., Nobarugoshi, Miyako-jima Is., Ryukyu Isls., 12. II. 2003, Y. Hɪʀᴀɪ leg.; 2 exs., Mt. Yarabu-dake, Ishigaki-jima Is., Ryukyu Isls., 27. III. 2002, K. Nᴀᴋᴀᴛᴀ leg.; 3 exs., Nagura, Ishigaki-jima Is., 22. III. 1999, Y. Kᴜʀᴏsᴀ leg.; 2 exs., Takeda-rindo, Ishigaki-jima Is., 31. III. 1994, K. Tᴏʏᴏᴅᴀ leg.; 2exs., Ohara, Iriomote-jima Is., Ryukyu Isls., 29. XII. 1977, Y. Kᴜʀᴏsᴀ leg.; 3 exs., Toyohara, Iriomote-jima Is., Ryukyu Isls., 1. III. 2000, H. Wᴀᴛᴀɴᴀʙᴇ leg.

要約

秋田 勝己・益本 仁雄：日本産のゴミムシダマシ科甲虫の新種・稀少種（第4報）．——— 日本産のゴミムシダマシ科のうち，スナゴミムシダマシ族スナゴミムシダマシ属の1新種，*Gonocephalum hiranoi* sp. nov. ショウナンスナゴミムシダマシ，カブトゴミムシダマシ族コブスジツノゴミムシダマシ属の1新種，*Boletoxenus kawadai* sp. nov. イリオモテコブスジツノゴミムシダマシ，エグリゴミムシダマシ族ヨツモンツヤゴミムシダマシ属1新種，*Diaclina nakatai* sp. nov. ヒラヨツモンゴミムシダマシ，同族エグリゴミムシダマシ属の1新種，*Uloma tadafumii* sp. nov. ナカタエグリゴミムシダマシを記載・命名した．また，同族ヘリアカゴミムシダマシ属の *Eutochia atra* PIC ニセヘリアカゴミムシダマシを初めて日本から分布報告した．

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Ent. Rev. Japan, **58** (2): 183–186, Oct. 30, 2003

Description of a New Species of the Genus *Tachinus* (Coleoptera: Staphylinidae) from Sichuan, Southwest China[1]

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Abstract A new species of the genus *Tachinus* collected from Wolong Natural Reserve of Sichuan Province, Southwest China are described under the name of *T.* (*Tachinus*) *robustus* and its major characters are illustrated.

In recent years, we collected a large number of specimens belonging to the genus *Tachinus* GRAVENHORST from Sichuan Province, Southwest China. During the study on these specimens, we recognized many species in the genus including a distinct new species, which will be described in the following lines.

Before going further, we wish to express our hearty thanks to Dr. Kiyoshi ANDO, Osaka for his critical comments on the manuscript, to Prof. Nobuo OHBAYASHI and Assoc. Prof. Masahiro SAKAI of Ehime University, for their continuous guidance, and to Messrs. Liang TANG and Jia-yao HU for preparing of the materials used in this study.

***Tachinus* (*Tachinus*) *robustus* sp. nov.**

(Figs. 1–8)

Male. Body (Fig. 1) large in size, oval. Color reddish brown, shining; head almost black; mouthparts, 5th to 11th segments of antennae, disc of pronotum, scutellum, suture of elytra and each base of abdominal segments dark brown. Length: 7.4–7.7 mm (from front margin of head to anal end); 4.2–4.7 mm (from front margin of head to elytral apices).

Head subtriangular, widest across eyes, 0.57 times as wide as pronotum, very finely and sparsely punctate, with dense and coarse microsculpture consisting mostly of unequal meshes at the middle part and sinuate transverse lines at the base. Eyes moderately large and convex; ocular seta fine and short, located near inner-posterior margin of each eye. Antennae relatively short, only reaching to the posterior margin of pronotum; 1st to 4th segments glabrous except for a few long setae, 5th to 11th densely pubescent; the relative length of each segment from base to apex: 18.0 : 10.0 : 11.0 : 6.5 : 9.0 : 9.0 : 9.0 : 9.0 : 9.0 : 9.0 : 14.0; 10th segment a little

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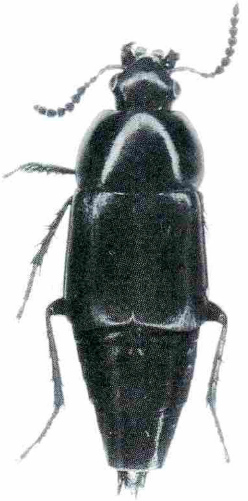


Fig. 1. *Tachinus* (*Tachinus*) *robustus* sp. nov., male.

wider than long (length /width = 0.88). Maxillary palpi moderately long, relative lengths of 4th and 3rd segments: 13 : 7.

Pronotum 0.68 times as long as wide, widest at basal third; anterior margin bisinuate; lateral margins arcuate; posterior margin slightly produced posteriorly in the middle; posterior angles blunt; disc with dense microsculpture consisting of elongate meshes; punctures similar to those on head. Scutellum subtriangulate, with microsculpture similar to that on pronotum.

Elytra gradually broadened posteriad, those in sutural length 1.30 times as long as the median length of pronotum, 0.82 times as long as wide; conjoint apical margin slightly emarginate at the middle; apical angles broadly rounded. Surface provided with microsculpture consisting mostly of small, polygonal meshes; punctures somewhat coarser than those on pronotum.

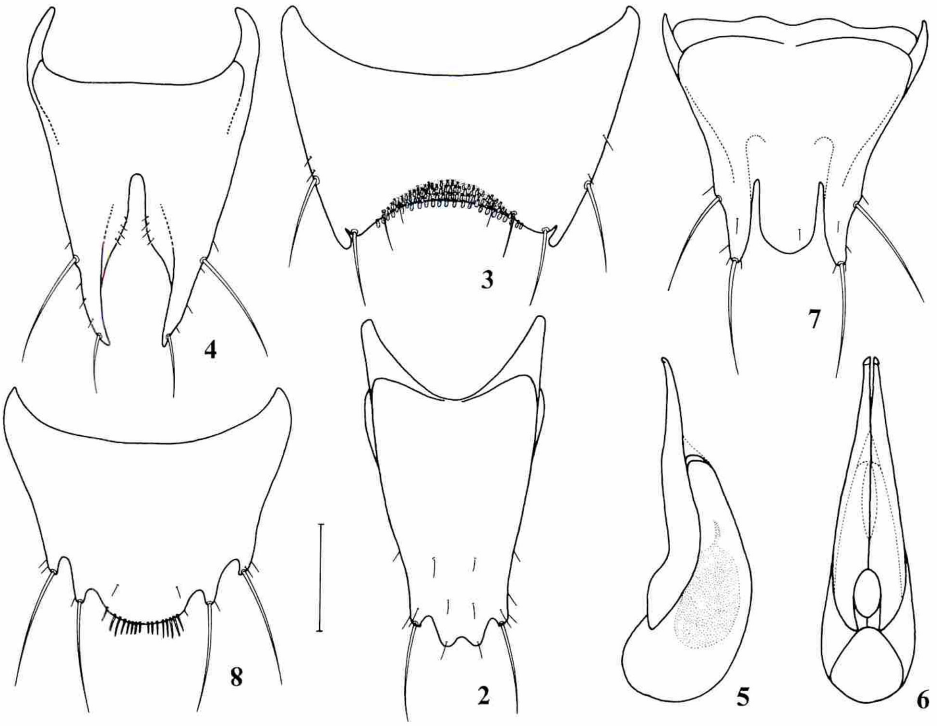
Abdomen triangular, narrowed from base to apex. Surface sparsely and evenly covered with fine pubescence; punctures distinctly coarser than those on elytra; microsculpture fine but dense, consisting mostly of waved transverse lines. Third to 4th tergites each with a pair of distinct pruinose spots near the middle. Eighth tergite (Fig. 2) four-lobed with inner lobes much longer than outer lobes. Seventh sternite (Fig. 3) broadly emarginate at apical margin, with granulate zone sickle-shaped in form. Eighth sternite (Fig. 4) bilobed; the lobes robust and curved inward and ventrad, the depth of incision between the lobes 0.66 times as long as the length of the sternite. Aedeagus (Figs. 5 and 6) moderately large with lateral lobes long and sinuate, gradually tapering towards apices.

Legs moderately long; fore tarsal segments 1–4 dilated; relative lengths of hind tarsal segments from base to apex: 10.0 : 12.0 : 9.0 : 7.0 : 22.0.

Female. Fore tarsal segments normal. Eighth tergite (Fig. 7) three-lobed; inner lobe broad and distinctly shorter than outer lobes. Eighth sternite (Fig. 8) five-lobed; inner lobes fused with each other, fimbriate apically; both intermediate and outer lobes moderately short. The other characters are similar to those of male.

Type series. Holotype: ♂, Wolong, Wenchuan County, Sichuan Province, 28–29. VII. 2001, LI and ZHAO leg. Paratype: 1♀, same data as the holotype.

The type specimens are deposited in the Insect Collections of Department of Biology,



Figs. 2–8 *Tachinus* (*Tachinus*) *robustus* sp. nov. — 2. male 8th tergite; 3. male 7th sternite; 4. male 8th sternite; 5. aedeagus in lateral view; 6. aedeagus in ventral view; 7. female 8th tergite; 8. female 8th sternite. (Scale: 0.5 mm)

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Distribution. China (Sichuan Province).

Remarks. This new species is similar to *Tachinus emeiensis* Zhang *et al.* (2003) from Mt. Emei of Sichuan Province, but can be readily distinguished from the latter by the following characters: the body distinctly smaller; coloration of head and pronotum visibly darker; male 7th sternite with sickle-shaped granulate zone; lateral lobes of aedeagus sinuate in lateral view; inner lobe of female 8th tergite distinctly separated from outer lobes, lacking nick at apex.

Etymology. The name of this species derivers from the Latin word robustus (= robust), after its robust body.

要　　約

趙　梅君・李　利珍・張　艶：四川省産 *Tachinus* 属の１新種．————四川省臥龍自然保護区の調査により採集された *Tachinus* 属の１新種を *Tachinus* (*Tachinus*) *robustus* と命名し記載した．本種は本年，同省の峨眉山を基産地として記載された *T. emeiensis* に近縁であるが，頭部及び前胸背の彩色の相異，腹板及び雄交尾器の明瞭な形態的差異などにより明らかに別種であると判定した．

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Scirtidae of the Oriental Region, Part 3
A New Species of the Genus *Prionocyphon* (Coleoptera: Scirtidae) from Laos, with a World Check List of the Species

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Abstract As the third part of a revision of the family Scirtidae from the Oriental Region, a new species *Prionocyphon laosensis* sp. nov. is described from Laos. This is the first record of the genus from Laos. A world check list of the species of the genus is given in the appendix.

Introduction

The genus *Prionocyphon* is represented by 15 species from all over the world (KITCHING and ALLSOPP, 1987; KLAUSNITZER, 1976, 1980; NYHOLM, 1971; PIC, 1914). From the Oriental region, only three species of the genus have hitherto been recorded: *viz*. *Prionocyphon antice-testaceus* KLAUSNITZER known from Bhutan, *P. minusculus* KLAUSNITZER from Vietnam, and *P. umbratilis* KLAUSNITZER from Bhutan.

In the present paper, we are going to describe an additional remarkable new species of the genus *Prionocyphon* from Laos. In addition, a world check list of the species of the genus is given in the appendix.

The abbreviations used in the present paper are as follows: PL–length of pronotum; PW–width of pronotum; EL–length of elytra; EW–width of elytra; TL–total length (PL plus EL).

The holotype is deposited in the collection of the Naturhistorisches Museum Wien (NMW).

We wish to express our sincere gratitude to Dr. M. JÄCH (NMW) for his kind support in the material.

Prionocyphon laosensis YOSHITOMI et M. SATÔ, sp. nov.

(Figs. 1–2)

Description. Holotype, male. Body oval, strongly convex above, shining, densely covered with easily abrasive short setae throughout. Coloration of body almost brown, but 2nd to 6th

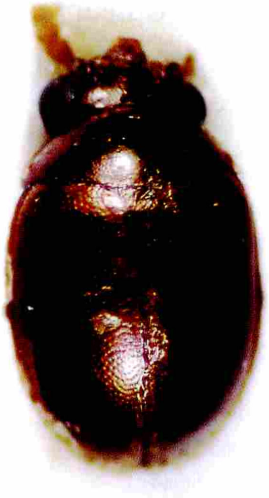

Fig. 1. Habitus of *Prionocyphon laosensis* YOSHITOMI et M. SATÔ, sp. nov., holotype, male.

antennal segments and legs paler.

Head very large, a little narrower than PW, almost flat in dorsal surface, closely and finely punctate; clypeus short, with almost straight front margin. Eyes large, strongly prominent; the distance between eyes about 2.0 times as long as a diameter of an eye. Antennae missing in 7th to 11th segments, stout; scape oval, large, projecting strongly dorso-anteriorly; pedicel very small; 3rd small, oval; 4th to 6th subtriangular. Pronotum transverse, strongly depressed in lateral part, covered closely with small punctures; anterior and posterior margins gently arcuate; antero- and postero-lateral corners almost right-angled; lateral margins short, gently arcuate; PW/PL 2.46. Scutellum equilateral-triangular, punctate as on pronotum. Elytra oval, strongly convex, widest at the middle; EL/EW 1.24, EL/PL 3.60, EW/PW 1.18, TL/EW 1.59. Legs moderate in length.

Apical margin of 7th abdominal sternite shallowly concave. Eighth tergite lightly sclerotized, trapezoidal, bisinuate in posterior margin, sparsely punctate in posterior part, bearing some minute setae near posterior margin, with a pair of long and slender apodemes protruding from near antero-lateral corners; 8th sternite membranous, V-shaped; 9th tergite lightly sclerotized, trapezoidal, densely covered with short spines in posterior part, with a pair of long and slender apodemes; 9th sternite lightly sclerotized, oval, bearing long setae in posterior part. Tegmen oblong, moderately sclerotized, lightly curved ventrally, widest at about proximal 1/4; anterior part projecting anteriorly; parameres indistinct, covered with fine punctures, with obtuse apices. Penis long, slender, as long as tegmen, lightly curved ventrally, widest at proximal 1/9, consisting two simple projections; pala gently tapered posteriad, with arcuate anterior margin; ventral projection (probably parameroids) excised at apex, gently tapered posteriad, but lightly widened in proximal 2/3; dorsal projection (probably trigonium and its projection) protruding from middle part of ventral projection, rod-liked, long, slender, exceeding ventral projection and bilobed in apical part.

Measurement. TL 2.30 mm; PW 1.23 mm; PL 0.50 mm; EW 1.45 mm; EL 1.80 mm.

Type material. Holotype (NMW): 1 ♂, "C-LAOS: Prov. Viangchan / Phou Khao Khouay

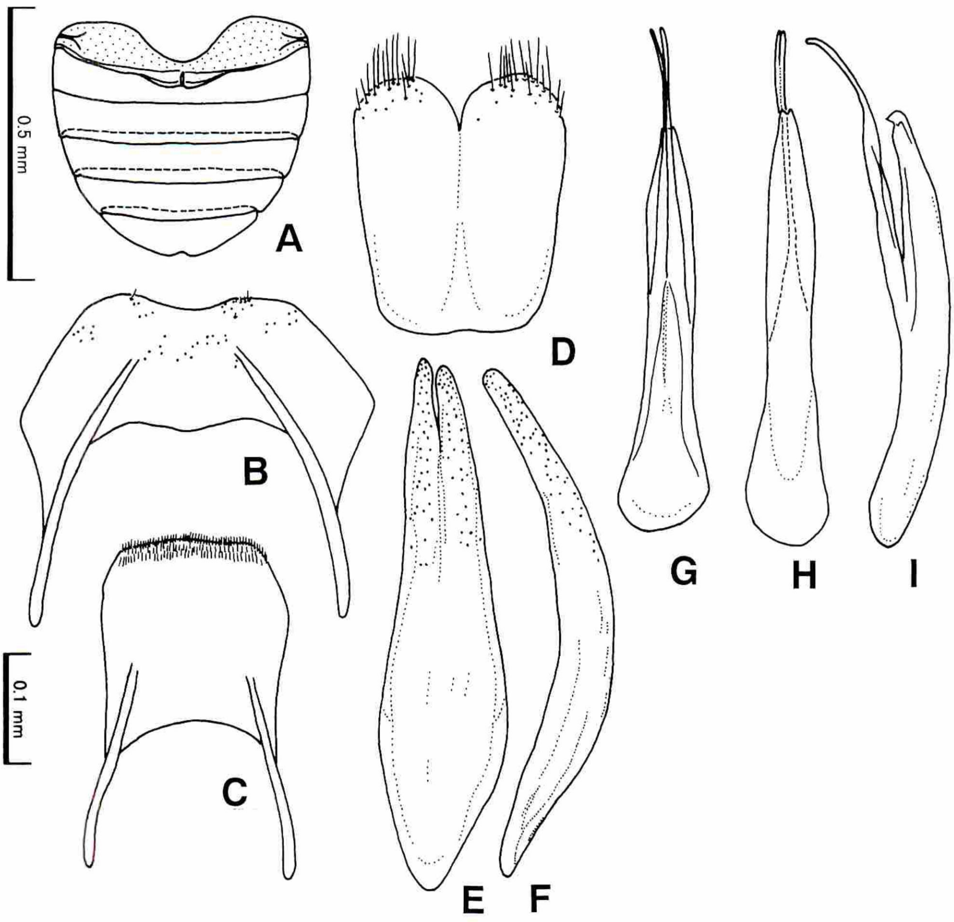

Fig. 2. *Prionocyphon laosensis* YOSHITOMI et M. SATÔ, sp. nov. — A, abdominal sternites; B, 8th tergite; C, 9th tergite; D, 9th sternite; E, tegmen in dorsal view; F, ditto in lateral view; G, penis in dorsal view; H, ditto in ventral view; I, ditto in lateral view.

NP / Nam Leuk / env. Tad Leuk Waterf.", "1. –8. 6. 1996, 200 m / at light / leg. Schillhammer (15a)", "genitalia slide no. HY 784".

Remarks. This species is similar to *Prionocyphon ovalis* KIESENWETTER and *Prionocyphon serricornis* (MÜLLER) in the external features, but is easily distinguishable from them by the male genital features.

Etymology. This new species is named after the country name of "Laos R. D. P.".

要　　　約

吉富 博之・佐藤 正孝：東洋区のマルハナノミ，パート3. ラオスからのエダヒゲマルハナノミ属の１新種，および世界の種のチェックリスト. ———ラオスからエダヒゲマルハナノミ属 *Prionocyphon* の１新種 *Prionocyphon laosensis* sp. nov.を記載した. また，本属の世界の種のチェ

ックリストを巻末に示した.

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Appendix

A world check list of the species of the genus *Prionocyphon* REDTENBACHER

Prionocyphon anticetestaceus KLAUSNITZER, 1976	Bhutan
Prionocyphon auritus CHAMPION, 1897	Panama
Prionocyphon discoideus SAY, 1825	U.S.A.
Prionocyphon fuscipennis KIESENWETTER, 1874	Japan
Prionocyphon laosensis YOSHITOMI et M. SATÔ, sp. nov.	Laos
Prionocyphon limbatus LECONTE, 1865	U.S.A.
Prionocyphon majusculus NYHOLM, 1971	Morocco
Prionocyphon minusculus KLAUSNITZER, 1980	Vietnam
Prionocyphon niger KITCHING et ALLSOPP, 1987	Australia
Prionocyphon numidicus NYHOLM, 1971	Algeria
Prionocyphon ornatus ABEILLE, 1881	Syria
Prionocyphon ovalis KIESENWETTER, 1874	Japan
Prionocyphon pilicornis CHAMPION, 1897	Central America
Prionocyphon serricornis (MÜLLER, 1821)	Europe, England, N. Africa
Prionocyphon sexmaculatus LEWIS, 1895	Japan
Prionocyphon umbratilis KLAUSNITZER, 1976	Bhutan

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Scirtidae of the Oriental Region, Part 4
Genus *Elodes* (Coleoptera: Scirtidae) of Nepal

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Abstract Two new species of the genus *Elodes*, *E. nepalensis* sp. nov. and *E. morimotoi* sp. nov., are described from Nepal. *Elodes burmensis* KLAUSNITZER is redescribed based on the additional material.

Introduction

From Nepal, only one species of the genus *Elodes* LATREILLE, *Elodes burmensis* KLAUSNITZER, has been recorded (KLAUSNITZER, 1976, 1980; YOSHITOMI, 2002). In the present paper, we are going to describe two new species of the genus *Elodes* from Nepal. In addition, the redescription of *Elodes burmensis* KLAUSNITZER is given with figures of the male genitalia.

The abbreviations used in the present paper are as follows: PL–length of pronotum; PW–width of pronotum; EL–length of elytra; EW–width of elytra; TL–total length (PL plus EL).

The holotypes described in the present paper are deposited in the collection of the Biosystematic Laboratory, Graduate School of Social and Cultural Studies, Kyushu University, Fukuoka (BLKU). The paratypes of *Elodes nepalensis* sp. nov. are deposited in BLKU, Entomological Laboratory, Ehime University, Matsuyama (EUM), Naturhistorisches Museum Wien (NMW) and National Science Museum, Tokyo (NSMT).

Elodes nepalensis YOSHITOMI et M. SATÔ , sp. nov.

(Figs. 1 A, B; 2; 3)

Description. Holotype, male. Body oblong, convex above, shining, covered closely with short setae throughout. Coloration of head, mouth parts, antennae, scutellum, legs and ventral surface of body black, but femora and 1st to 3rd antennal segments paler; pronotum almost black, but anterior and lateral margins widely yellowish brown; elytra almost black, with a pair

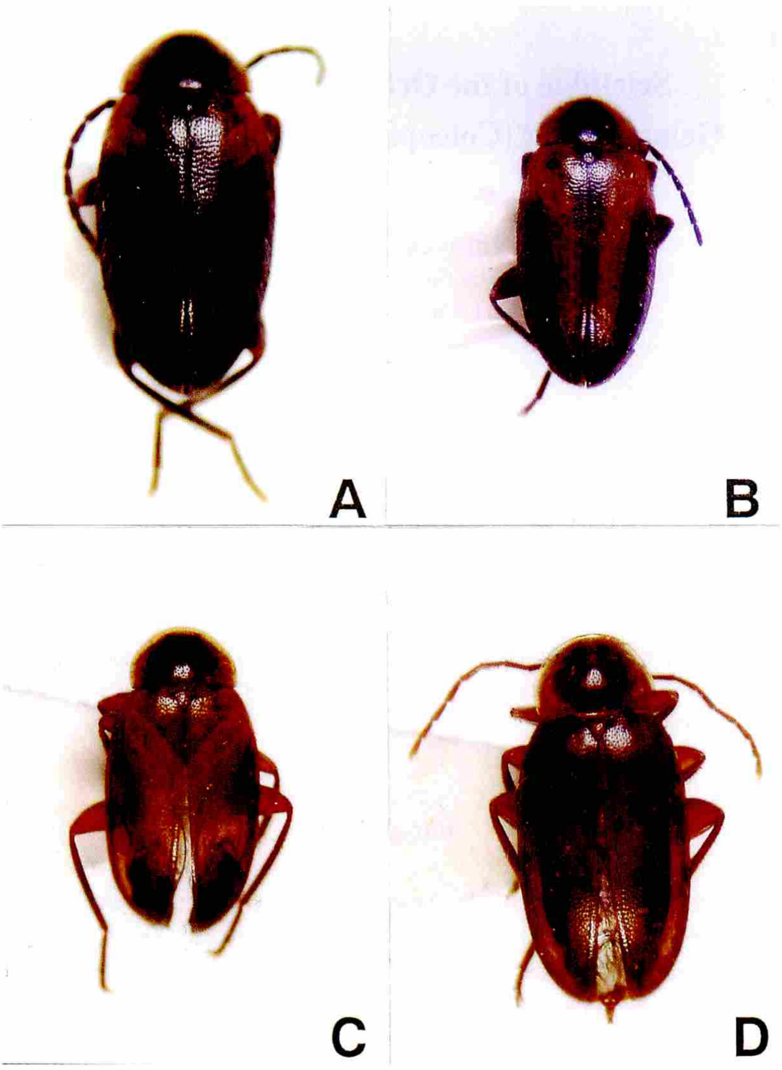

Fig. 1. Habitus of *Elodes* species. — A, *Elodes nepalensis* sp. nov., holotype, male; B, ditto, paratype, male showing color variation; C, *E. morimotoi* sp. nov., holotype, male; D, *E. burmensis* KLAUSNITZER.

of yellowish brown markings situated on humeral angles; its markings variable in size, reaching about proximal 1/4 (holotype) to 3/4 of elytra.

Head lightly convex above, finely punctate; clypeus relatively long, expanded laterally in apical part, with almost straight front margin. Labrum transverse, arcuate in front margin. Eyes large, lightly prominent; the distance between eyes about 1.4 times as long as the maximum diameter of an eye. Antennae relatively long, reaching about proximal 1/2 of elytra, normally filiform in 4th to 10th; approximate ratio of the each segment as (n =1) 2.7 : 1.3 : 1.0 : 3.7 : 3.3 : 3.2 : 3.0 : 3.0 : 2.7 : 2.7 : 3.7.

Pronotum semicircular, broadest at the base, lightly depressed above in antero-lateral part, finely and regularly punctate; PW/PL 1.51–1.80 (1.60). Scutellum subtriangular, punctate as on

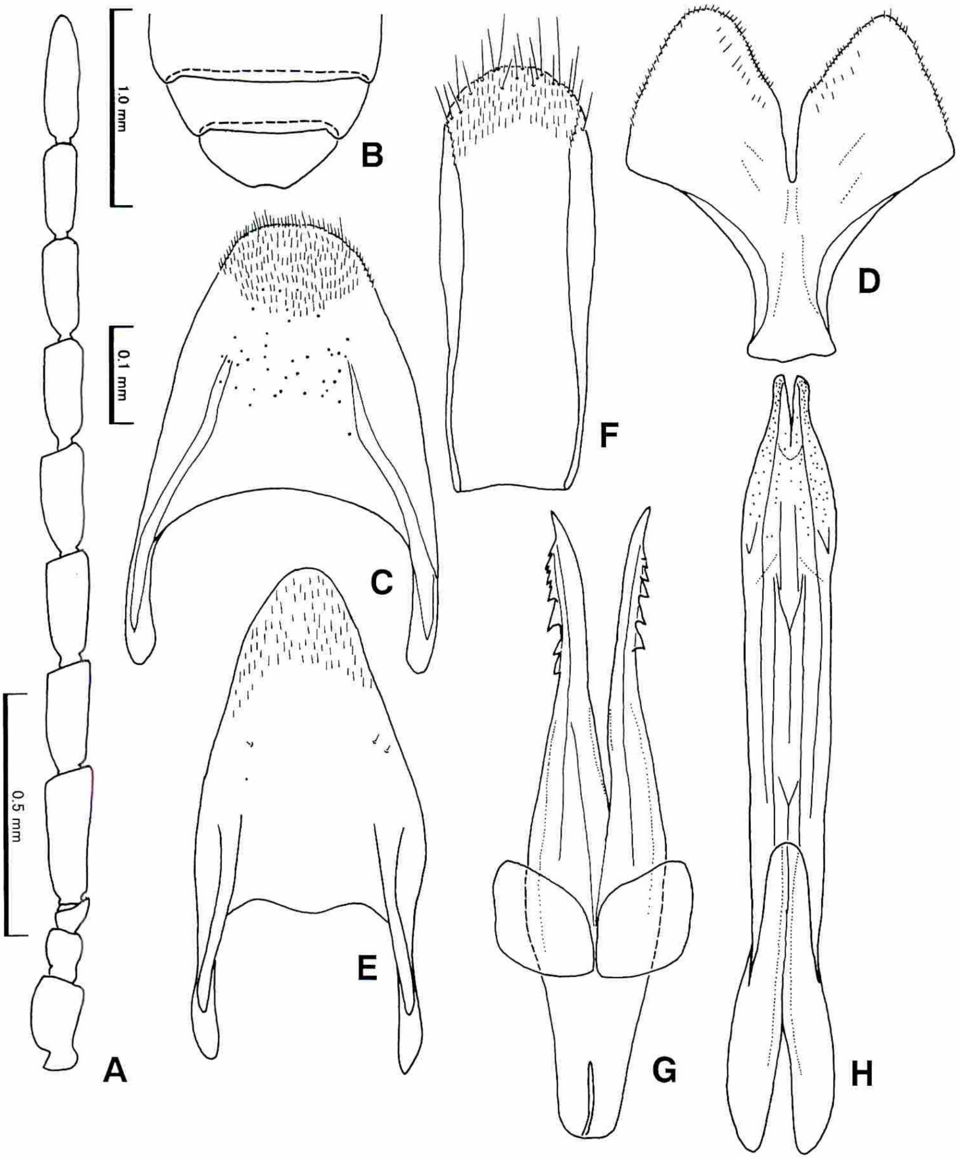

Fig. 2. *Elodes nepalensis* sp. nov., paratype, male. — A, antenna; B, 5th to 7th abdominal sternites; C, 8th tergite; D, 8th sternite; E, 9th tergite; F, 9th sternite; G, tegmen; H, penis. Scales: 1.0 mm for B; 0.5 mm for A and 0.1 mm for C–H.

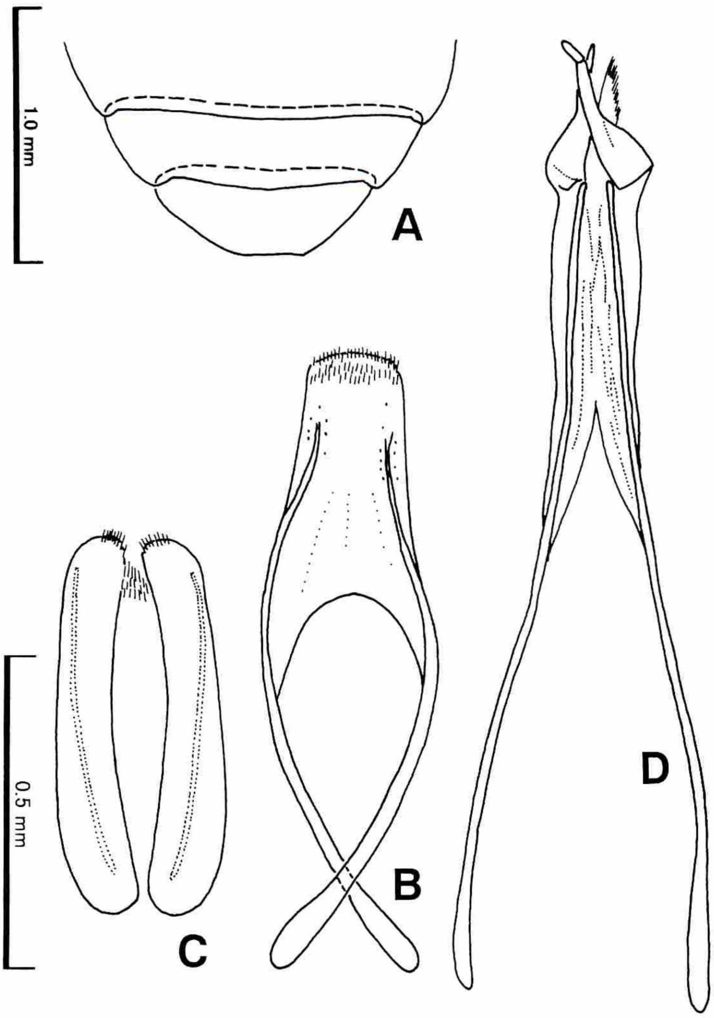

Fig. 3. *Elodes nepalensis* sp. nov., paratype, female. — A, 5th to 7th abdominal sternites; B, 8th tergite; C, 8th sternite; D, ovipositor. Scales: 1.0 mm for A; 0.5 mm for B–D.

pronotum. Elytra oblong, lightly convex above in mesal part, broadest at the middle, gently arcuate in lateral margin; EL/EW 1.58–1.72 (1.64); EL/PL 3.29–4.00 (3.58); EW/PW 1.32–1.44 (1.37); TL/EW 2.01–2.23 (2.10). Legs relatively long.

Apical margin of 7th abdominal sternite shallowly arcuate. Eighth tergite well sclerotized in mesal part, trapezoidal, bearing short spines in apical part, covered sparsely with punctures in mesal part, with a pair of stout apodemes protruding from antero-lateral corners; 8th sternite moderately sclerotized, broad fan-shaped, excised deeply in apical margin, covered with short spines along apical margin; 9th tergite lightly sclerotized, subtriangular, covered with short spines in apical part and provided with a pair of stout and short apodemes; 9th sternite lightly sclerotized, oblong, covered with short spines and long setae in apical part. Tegmen large, well sclerotized, gently tapered in proximal part; parameres long, pointed at apex, bearing 5–7 sharp and large serrae behind the apex. Penis long, slender, well sclerotized, about 1.3 times as long as tegmen and covered with fine punctures in apical part; sides almost parallel, but lightly widened in apical 1/4 and proximal 1/6.

Female. Sexual dimorphism indistinct in external feature, but antennae are somewhat slender in female; PW/PL 1.69–1.79 (1.74); EL/EW 1.53–1.62 (1.56); EL/PL 3.63–3.97 (3.83); EW/PW 1.38–1.46 (1.42); TL/EW 1.91–2.04 (1.97). Apical margin of 7th abdominal sternite gently arcuate. Eighth tergite moderately sclerotized, elongate-trapezoidal, provided with short spines in apical part and with a pair of long and stout apodemes protruding from antero-lateral corners; 8th sternite lightly sclerotized, oblong, bearing short spines in apical part. Ovipositor with relatively long baculus; relative lengths of stylus, coxite and baculus as (n =1) 1.0 : 3.5 : 26.5. Prefensor indistinct.

Measurement. Male: TL 3.10–3.75 (3.31) mm; PW 1.08–1.35 (1.15) mm; PL 0.68–0.75 (0.72) mm; EW 1.45–1.85 (1.58) mm; EL 2.40–3.00 (2.59) mm. Female: TL 3.67–3.73 (3.70) mm; PW 1.30–1.35 (1.33) mm; PL 0.75–0.80 (0.77) mm; EW 1.80–1.95 (1.88) mm; EL 2.90–2.98 (2.93) mm.

Type materials. 36♂♂, 4♀♀. Holotype (BLKU): 1♂, "(E. NEPAL) Basantapur (2,300 m) / 27°07'N, 87°24'E / May 8, 1972 Malaise trap (2) / Kyushu Univ. Col.", with red type label. Paratypes (BLKU, EUM, NMW, NSMT): 7♂♂, same data as for the holotype; 1♂, 1♀, same locality but in May 2, 1972, genitalia on side no. HY 800; 2♂♂, same locality but in May 3, 1972; 2♂♂, same locality but in May 4, 1972; 6♂♂, same locality but in May 5, 1972, genitalia on slide no. HY 749; 3♂♂, 1♀, same locality but in May 6, 1972, female in slide no. HY 776; 1♂, same locality but in May 7, 1972; 1♂, same locality but in May 9, 1972; 12♂♂, 2♀♀, same locality but in 10 May, 1972, male and female genitalia on slide nos. HY 421, 422, 780, 800.

Remarks. This species belongs to the *marginata* species-group of the genus *Elodes*. From the Oriental Region, only one species of the species-group, *E. wittmeri* KLAUSNITZER, has been known, but is clearly distinguishable from the new species by the coloration of body, and the different shapes of 8th sternite, tegmen and penis.

Biological notes. Biological information is very scarce. All the type series were captured by Malaise trap.

Etymology. The species is named after the country name of "Nepal".

Elodes morimotoi YOSHITOMI et M. SATÔ, sp. nov.

(Figs. 1 C, 4)

Description. Holotype, male. Body oblong, lightly convex above, shining, closely covered with yellowish white setae throughout. Coloration of body almost yellowish brown, but head and tibiae are fuscous.

Head almost flat in dorsal surface, minutely granulated; clypeus long, expanded laterally in apical part, shallowly concave in front margin. Eyes large, prominent; the distance between eyes about 1.1 times as long as the maximum diameter of an eye. Antennae missing in 6th to 11th segments; approximate ratio of each segment as 3.5 : 1.5 : 1.0 : 6.0 : 5.0. Pronotum semicircular, broadest at the base, depressed in antero-lateral part, minutely granulated; PW/PL 1.53. Scutellum subtriangular, finely punctate. Elytra oblong, slightly convex in mesal part, broadest at the middle; EL/EW 1.08; EL/PL 3.56; EW/PW 2.15; TL/EW 1.39. Legs long and

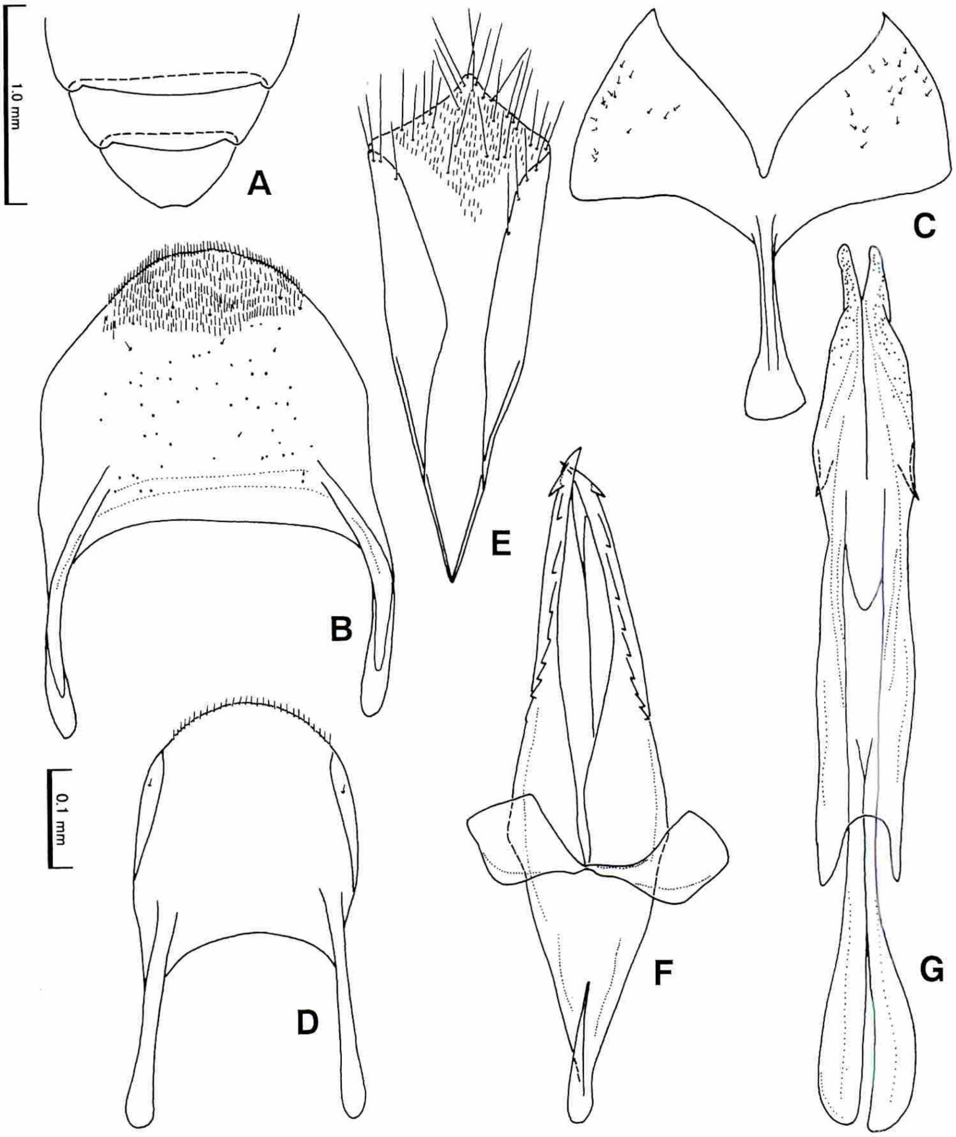

Fig. 4. *Elodes morimotoi* sp. nov., holotype, male. — A, 5th to 7th abdominal sternites; B, 8th tergite; C, 8th sternite; D, 9th tergite; E, 9th sternite; F, tegmen; G, penis. Scales: 1.0 mm for A; 0.1 mm for B–G.

slender.

Apical margin of 7th abdominal sternite shallowly concave. Eighth tergite moderately sclerotized, widely trapezoidal, sparsely covered with minute setae and with punctures in mesal part, provided with short spines in apical part and with a pair of stout apodemes protruding from antero-lateral corners. Eighth sternite Y-shaped; posterior part broad, covered sparsely with minute setae in apical part; anterior part long and slender. Ninth tergite lightly sclerotized, semicircular, provided with short spines along apical margin and with a pair of long apodemes protruding from near antero-lateral corners. Ninth sternite lightly sclerotized, oblong, pointed at apex, bearing very long setae and minute spines in apical part. Tegmen large, moderately sclerotized, tapered evenly to base; parameres long, pointed at apex, with a pair of large spinous serrae in just behind the apex, bearing obtuse and low serrae in apical 1/14 to 3/7. Penis long and slender, moderately sclerotized, about 1.3 times as long as tegmen; parameroids covered closely with fine punctures, tapered from apical 1/4 to 1/9, thence curved postero-laterally in apical 1/9, with rounded apices.

Female unknown.

Measurement. TL 3.88 mm; PW 1.30 mm; PL 0.85 mm; EW 2.80 mm; EL 3.03 mm.

Type material. Holotype (BLKU): 1♂, "May 5, 1972 Y. NISHIDA leg. / Kyushu Univ. Col.", "E. NEPAL, Basantpur (2,300m) / 27°07'N, 87°24'E", "genitalia on side no. HY 774", with red type label.

Remarks. This species is similar to the *minuta* species-group in the external feature of the specimen, but must be included in the *marginata* species-group judging from the male genital characteristics.

Biological notes. Biological information is very limited.

Etymology. This new species is named after Dr. K. MORIMOTO, who is the eminent Coleopteologist and the Emeritus Professor of the Kyushu University, Fukuoka.

Elodes burmensis KLAUSNITZER, 1974

(Figs. 1 D, 5)

Helodes (!) *burmensis* KLAUSNITZER, 1974, Ent. Nachr. Dresden 18(2): 17–25. (Type: Burma, Mishmi Hills, Lohit River; in BMNH, examined). KLAUSNITZER, 1980, Ent. Bl. Biol. Syst. Käfer, 76: 58–64.

Flavohelodes burmensis: KLAUSNITZER, 1980, Ent. Basiliensia 5: 195–214; YOSHITOMI, 1996, Elytra, Tokyo, 24: 310.

Elodes burmensis: YOSHITOMI, 2000, Jpn. J. syst. Ent., 6: 81.

Redescription. Male. The external feature was fully described by KLAUSNITZER (1974); PW/PL 1.42–1.56 (1.50); EL/EW 1.69–1.79 (1.73); EL/PL 3.26–3.63 (3.45); EW/PW 1.28–1.36 (1.32); TL/EW 2.18–2.33 (2.24).

Posterior margin of 6th sternite projecting and bearing some extra setae in the middle; apical margin of 7th sternite notched. Eighth tergite well sclerotized, with a pair of slender apodemes protruding from antero-lateral corners; postero-lateral corners distinctly prolonged postero-internally, curved internally and pointed at apex. Eighth sternite moderately sclerotized, fan-like in shape, covered with fine punctures in apical part. Ninth tergite lightly sclerotized, punctate in postero-lateral part, with a pair of long apodemes protruding from antero-lateral corners. Ninth sternite lightly sclerotized, oblong, covered with short setae and fine spines in apical part. Tegmen well sclerotized, widest at the middle; parameres broad, deeply notched at apex, bearing short spines on apical margin, with a pair of small denticulate projections in lateral margin at apical 1/8. Penis long, well sclerotized, about 1.5 times as long as tegmen; proximal part slender, subparallel sided; parameroids short, somewhat broad, obtuse at apex, covered with fine punctures; apical part of dorsal pieces curved laterally, pointed at apex.

Female unknown.

Measurement. TL 3.70–4.39 (4.10) mm; PW 1.25–1.50 (1.39) mm; PL 0.80–1.00 (0.92)

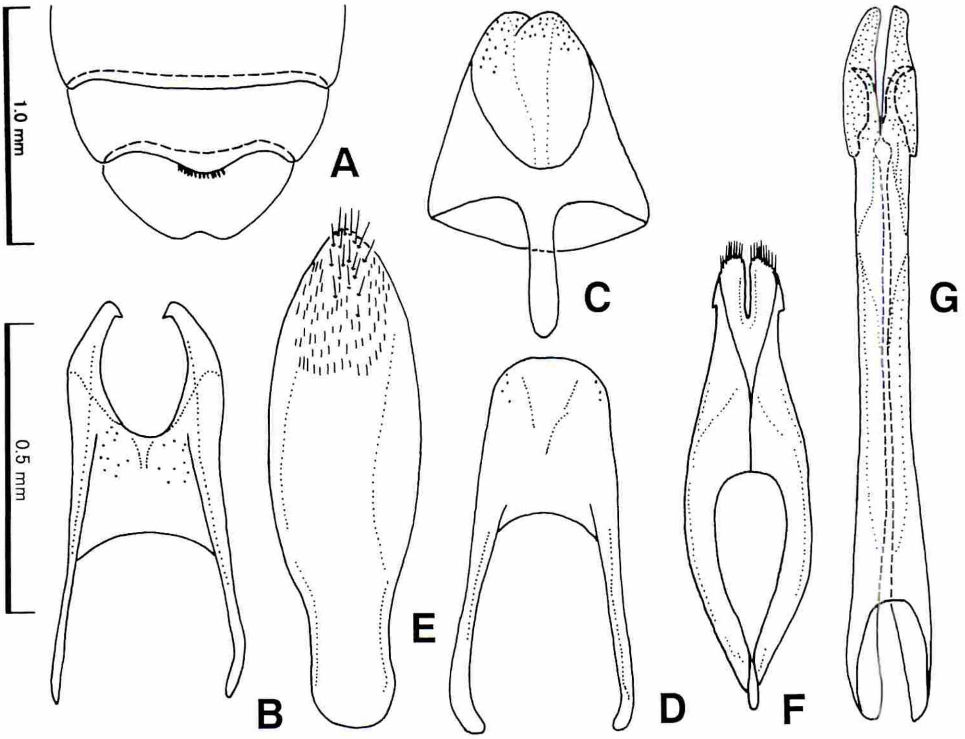

Fig. 5. *Elodes burmensis* KLAUSNITZER, male. — A, 5th to 7th abdominal sternites; B, 8th tergite; C, 8th sternite; D, 9th tergite; E, 9th sternite; F, tegmen; G, penis. Scales: 1.0 mm for A; 0.5 mm for B–G.

mm; EW 1.68–2.00 (1.83) mm; EL 2.90–3.42 (3.18) mm.

Additional materials. 1♂, "May 5, 1972 Y. NISHIDA leg. / Kyushu Univ. Col.", "E. NEPAL, Basantpur (2,300 m) 27°07'N, 87°24'E", "genitalia on slide no. HY 774"; 3♂♂, "Kharikhola, 2,100 m, Solukhumbu, Nepal / Oct. 7. 1979, M. SATO leg."; 1♂, "Poyan Khola, 2,730 m, Solukhumbu, Nepal / Oct. 7. 1979, M. SATO leg.", "genitalia on slide no. HY 773"; 1♂, "Kharte Danda, 2,700–3,081 m, Solukhumbu, Nepal, Oct. 7. 1979, M. SATO".

Distribution. Myanmar, Nepal, Vietnam, Thailand, India.

Remarks. The shape of apical part of penis is a little different to each other in the specimens from Myanmar, Nepal and Thailand. In this paper, we recognized them as the same species on the whole.

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要　約

吉富 博之・佐藤 正孝：東洋区のマルハナノミ，パート４．ネパールのマルハナノミ属．———ネパールからマルハナノミ属 *Elodes* の２新種 *E. nepalensis* sp. nov. と *E. morimotoi* sp. nov. を記載した．また従来からネパールより記録されている *Elodes burmensis* KLAUSNITZER について追加標本を基に雄交尾器を図示すると共に再記載を行った．

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———, 1976. Ergebnisse der Bhutan-Expedition 1972 des Naturhistorischen Museums in Basel Coleoptera: fam. Helodidae. *Dt. ent. Z. Neue Folge,* **23**: 213–220.

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YOSHITOMI, H., 2002. New record of *Elodes burmensis* (Coleoptera, Scirtidae) from Vietnam and India. *Elytra, Tokyo,* **30**: 213–214.

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原稿作成の要領

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1. 原稿はプリントアウトしたもの2部とフロッピーディスクに書き込んだものとを提出する．用紙はＡ４判を用い，左右に3cm 以上の余白をあけ，タイプライター，ワードプロセッサーあるいはコンピューターで打ち出したものとする．行間はダブルスペースとし，人名を除いて，表題や見出しを含めていかなる場合も大文字だけでは打たない．フロッピーディスクはマッキントッシュまたはＭＳ－ＤＯＳ フォーマットし，テキストファイルで入力すること．フロッピーディスクを提出できない場合は，プリント原稿をスキャナーで読み取るためイタリックやボールドなどの指定のない文字を使用し，下線や訂正の書き込みのない原稿（コピーでもよい）を一部付ける．2.報文原稿は，表題，著者名，所属機関とその所在地，または住所，刷り上がり 10 行程度までの（約150語）の英文の著者抄録 (Abstract)，本文，和文要約，文献の順に配列する．提出原稿の一部は無処置で，他の一部は動，植物の属およびそれ以下の学名に下線を引き，また人名には二重の下線を引く（第一字を除いて）．引用文献は著者名のアルファベット順に並べ，下記の形式で記す．

   Blackwelder, R. E., 1936. Morphology of the coleopterous family Staphylinidae. Smiths. misc. Coll., 94 (13): 1-102

   —1952. The generic names of the beetle family Staphylinidae with an essay on genotypy. Bull. U.S. natn. Mus., 200: i-iv+1-483.

   Müler, J., 1925. Terzo contributo alla conoscenza del genere Staphylinus L. Boll. Soc.ent.ital., 50: 40-48.

3. 報文中の採集または検視データは以下のように表記する．

   （例）3♂♂, 2♀♀, Amaishi, Hyôgo, 28. V. 1995, Y. Hayashi leg.

4. 原稿には原稿用紙と同質の表紙をつけ，これに表題，ランニング・タイトル（簡略化した論文表題，— 欧文 40 字内外），著者名，連絡先を明記し，赤字で原稿及び図表の枚数，別刷りの必要部数, その他連絡事項など記入．
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